FREE READER CLASSIFIED ADS IN THIS ISSUE!

CLARO CLARITY 09 turntable

AUDIO RESEARCH VSi60 integrated amplifier

INSPIRE ECLIPSE turntable

VIVID B1 loudspeakers

DAC SUPERTEST: 7 SUB - £1,000 DACS

TRANSFIGURATION TERMINATOR TONEARM

B&W CM5, ROKSAN K2 & JBL LS40 SPEAKERS
CAMBRIDGE AUDIO 650A INTEGRATED AMPLIFIER

12 PAGES OF LETTERS - THE BEST WINS A PAIR OF KEF iQ30 LOUDSPEAKERS! (UK ONLY)
Music is a universal pleasure that should not be denied to anybody. So, too, the beauty of music reproduced by valves. To make available to a wider audience the seductive, silky sound of the vacuum tube, PrimaLuna has developed a range of all-valve amplifiers with the construction, power and sonic performance of high-end electronics, but with one unique, inimitable feature: prices that can only be described as 'entry level'!

Since the arrival last year of PrimaLuna's first model, the ProLogue One, the audio community has been unable to contain its joy nor reign in its praise, because PrimaLuna has revolutionized the whole concept of 'affordable audio.' Commencing with a pair of integrated amplifiers with prices more typical of mundane, solid-state products, PrimaLuna has shown other manufacturers that compromises in fit and finish, styling and facilities are unnecessary.

And PrimaLuna has shown the music lover that 'high end' performance and pride of ownership can be made available to aficionados on a budget. But don't take our word for it. Audition your preferred ProLogue or the newly-launched Dialogue models at the PISTOL Music dealer of your choice. And prepare your wallet for a pleasant surprise!
In these days of rampaging unemployment and swine flu, I find myself curiously immune to the news. Maybe it’s just the human instinct for self-preservation, but I now find I can take a full half hour of BBC 5 Live without so much as batting an eyelid...

But one thing stopped me in my tracks the other day, stone dead. I might as well have been shot with a tranquiliser gun normally used to render wild African jungle beasts unconscious.

News came that Florence and the Machine’s new single, ‘Rabbit Heart (Raise it Up)’ had made number 12 in the charts, despite selling just 64 physical copies (i.e. CD singles)!

How times change. In 1999, I remember my suggestion that MP3 (as we so quaintly used to call them) was the future, produced mirth and malice in equal measure. Now in 2009, no less than 97% of all UK singles are sold as downloads...

So where does this all leave hi-fi? In a transitional phase, I’d say. Amazingly, on one hand we have ever more vinyl releases and new turntables to play them on, as the new Inspire Eclipse [p100] and Claro Clarity 09 [p108] show. On the other, we have a great many people still buying the old ‘silver Frisbee’ that is CD. That’s why this month’s group test [p15] features some superb affordable DACs which get the best from an ageing digital disc spinner, and interestingly provide a bridge to the brave new world of downloads too; most have USB inputs so you can play out the music on your computer hard drive direct into your hi-fi.

Then we have products such as Illustrate’s RipNAS [p86], which is a twenty first century digital transport by any other name. You feed it a CD and about four minutes later it spits it out, but with a very high quality uncompressed copy now on its internal hard drive. It will store about 2,800 albums, and is expandable to well over ten times that. The unit then plays the music via your home network, out through a Linn DS system, Squeezebox or suchlike, to your hi-fi.

So music’s on the move, hi-fi is changing and a new generation is growing up who regard the LP record with the same air of mystery as I would a wax cylinder. We live in interesting times! As for me, true to myself, I did not download ‘Rabbit Heart’ from iTunes, but trogged down to my local specialist record shop instead, and walked out with Florence and the Machine’s new ‘Lungs’ album on vinyl.

David Price, editor

testing

To ensure the utmost accuracy in our product reviews, Hi-Fi World has extremely comprehensive in-house test facilities, and our test equipment - from big names like Rohde & Schwarz and Hewlett Packard - is amongst the most advanced in the world.

Loudspeakers are measured using a calibrated Bruel & Kjaer microphone feeding a Clio-based computer analyser, using pulsed and gated sinewaves, in a large room to eliminate the room’s influence. Pickup arm vibration is measured with a Bruel & Kjaer accelerometer.

No other UK hi-fi magazine has in-house testing, and none has access to such advanced tests across all types of equipment. That’s why you can depend on Hi-Fi World reviews.
Paul Rigby rounds up seven of the best sub-£1,000 DACs...

Cambridge Audio's new 650A - £350 amplifier magic.

Inspire Eclipse - a brand new turntable from a brand new company.

Vivid B1 - superlative high end standmounters with trick transducer technology.

Sony's new X-series meets its illustrious forebears!

Audio Research's new VSi60 tube integrated - the Yank tank is back!
David Price has a fine time with these high end metal coned standmounters.

Noel Keywood compares B&W's CM5, JBL's LS40 and Roksan's TR-5 compact standmounting loudspeakers.

A marvellously musical pair of premium priced floorstanders, reviewed by David Price.

Noel Keywood auditions this quirky high end sub/sat speaker system package.

David Price is bowled over by this punchy sounding new tube integrated.

Noel Keywood tunes in to this high quality mid-price multichannel AV receiver.

Paul Rigby tries the latest incarnation of a popular budget integrated.

Paul Rigby tries digital-to-analogue convertors from Russ Andrews, Musical Fidelity, Beresford, Cambridge Audio, MGL Audio, Stello and Benchmark.

Patrick Cleasby tries a superb new high end Network Attached Storage device.

Tim Jarman compares Sony's new digital portable to its illustrious predecessors.

Paul Rigby tries the latest AstinTrew CD player/amplifier with Spendor speakers.

Paul Rigby with all the latest black plastic releases.

Adam Smith auditions this brand new turntable from a brand new manufacturer, and finds it a most promising start.

This fascinating new parallel tracking tonearm gets its first review from Adam Smith.

David Price tries Origin Live's new 'Upgrade' turntable mat and Oyaide's HS-CF universal headshell...

This enigmatic, high quality turntable made in a limited run of only thirty pieces is reviewed by Adam Smith.

A bumper twelve pages of your views and queries this month!

Our favourite classic kit listed for your perusal.

Ensure your copy every month and save money too!

Paul Rigby rounds up the latest audiophile releases.

Your chance to win a pair of superb Audiosmile Kensai loudspeakers, worth £1,500!

The team get to grips with matters music, hi-fi and life!

A comprehensive guide to UK hi-fi retailers.

Three pages of second-hand bargains.

What we hope to bring you in the next issue...

...and finally, Paul Rigby takes a walk on the wild side this month, with Edward Ka-Spel's 'O'er a Shalabast'r Tyde Strolt Ay' from 2003!
KIND OF BLU
Described as "a fusion of the acclaimed flagship SA-7S1 Super Audio CD player and the cutting edge of the company's Blu-ray technology", Marantz's brand new UD9004 Blu-ray and SACD player looks an impressive beast. Whatever disc you care to spin, be it CD, SACD, DVD-Video or Blu-ray, the new profile 2.0 UD9004 player from Marantz will deliver exceptional results, Marantz says. At the heart of the video circuit is the Silicon Optix Realta processor which offers Hollywood Quality Video (HQV) from what is essentially "a professional broadcast-quality video processing platform". Particular attention has been paid to audio performance, and the UD9004 incorporates a three section copper plated chassis that separates audio, video and power circuits to shield highly sensitive audio components. The audio section is derived from Marantz's acclaimed flagship SA-7S1 Super Audio CD player and comprises four separate circuit boards to avoid crosstalk, including two dedicated boards for the XLR outputs. The circuitry uses the famous Marantz HDAM-SA2s for all channels, while a dedicated, oversized toroidal transformer delivers the power. High Definition audio formats are processed by a high performance 32bit floating point type Analog Devices DSP and converted into a high quality multi-channel LPCM signal. Audio replay can be further enhanced via the Pure Direct Mode, which shuts down the video sections and display for best performance. The newly developed disc mechanism has an ultra-thin aluminium diecast tray and high inertia clamp, with a heavy zinc enclosure and insulated double layer cover to remove all vibration. The tank-like build of the upgraded M1 chassis further reduces mechanical distortion, says Marantz. The extensively braced, chassis has a thick bottom plate with machine milled copper feet, sustaining mechanical stability and therefore sound quality. In fact, the design weighs in at massive 19.2 kgs. For more details, click on www.marantz.co.uk.

NEAT IDEA
Neat's new Elite SX loudspeaker is said to "deliver serious audio performance from discreet and attractive enclosures, by means of unorthodox thinking and the ingenious implementation of some unusual ideas". Unlike traditional bass reflex designs, the SX incorporates an innovative staggered port tuning design, where a 32mm diameter port on the rear of the cabinet is tuned to 40Hz, with a narrow operating band. An additional 50mm diameter port, mounted in the base of the cabinet, is tuned higher, over a wider operating band. This system delivers "a very convincing full-bodied bass performance, far more impressive than might be expected for an enclosure of these dimensions", says Neat. The cabinet stands above a solid, heavy slate plinth by means of 20mm aluminium spacers. This allows the port to breathe correctly and fixes the distance from the lower port to the plinth at the optimum height. The main drive unit has a 6.5in doped paper cone, ferrite magnet assembly and a fixed aluminium phase plug to enable smoother integration with the tweeter. The new tweeter is a 25mm soft-fabric dome type with internal damping and a non-resonant chamber. Neat believe that the choice of tweeter is critical, because the tweeter lends the whole speaker its essential character and integrity. In this context, the tweeter's strengths of superb dynamic contrast and accurate tonal colour match the similar virtues of the main drive unit. The crossover, though simple in execution, is the result of painstaking development, the company says. The three-element type uses low-loss air-core inductors and a high-grade polypropylene capacitor. Vital statistics are 900x200x180mm. For details, click on www.neat.co.uk.

THE A TEAM
Musical Fidelity's new £6,000 AMS35i 35W pure Class A integrated amplifier is described as "the epitome of the purest audiophile high end". The circuitry is a low feedback, fully complementary pure Class A design which produces excellent technical performance, it is claimed. Each channel has a separate fully balanced, choke regulated power supply to ensure minimum noise and maximum performance. The AMS35i's overall size is exactly the same as the Primo preamp, and just like it, also sports a front panel machined from solid billet. The high quality heatsinks are beautifully finished with radiused edges, and the top plate is machined from a solid billet. "The AMS35i is quality through and through: The AMS35i's visuals and finish quality reflects the superlative quality of the circuitry inside", says Musical Fidelity. For more information, click on www.musicalfidelity.com.
OPUS ONE

Philips' GoGear Opus is a new portable media player sporting "an advanced screen, superior quality audio and easy access to online content". Despite its small size of just 107x115x57mm the Opus still manages to squeeze in a 2.8" LCD screen of 320x240 pixels. The player's high quality in-ear headphones feature Philips' Angled Acoustics technology to direct music more precisely within the curvature of the ear canal. Battery life is a healthy thirty hours of music playback and six hours of video, so you can enjoy your media for longer. Access to online content is via the Internet Video Download application which makes it simple to transfer online videos to the device from video-sharing sites such as YouTube, MySpace and Google Video. The player also allows you to play content downloaded from the popular BBC iPlayer, so you can enjoy the best of the BBC wherever you are. The Opus supports many popular file formats such as MP3, WMV, AAC (non-DRM) and FLAC for audio and MPEG4, WMV and SMV video. The supplied software also quickly and easily converts many other file formats including AVI, MOV, RM, WMV and DVDs to a compatible format. The Philips GoGear Opus is available from June in storage sizes of 8GB and 16GB for an estimated selling price of £99 and £129 respectively. For details, click on www.philips.com or call 0906 1010 016.

FIFTY SOMETHING

Alium Audio are pleased to announce an exclusive new range of valves to the UK, made by Chinese manufacturer Shuguang to celebrate their fiftieth anniversary. The Treasure Series is by far the most sophisticated and expensive vacuum tube range made by China's oldest valve manufacturer, it is claimed, made to exacting standards and sporting the world's first use of High Polymer Compound Carbon (HPCC) giving the glass envelope a distinctive Black powder finish. The range encompasses 300B and 2A3 triodes, extending to KT88, KT66 and 6CA7 [EL34 equivalent] pentodes/tetrodes and CV188 [6SN7]. Prices start at £145/pair for the 6CA7 up to £375/pair for the 300Bs, plus VAT. Each pair comes in its own luxury box, factory tested and carefully matched to provide ultimate performance from day one. A ninety day warranty is included for piece of mind. More details are available from www.aliumaudio.com or by phoning +44(0)1273 608332.

MODE MUSIC

B.K. Electronics are pleased to announce that they have become the UK distributor for the Anti-Mode 8033 advanced DSP room correction device, said to remove room modes that can ruin the sound of your sub bass system. If you have a good subwoofer but you feel the bass is boomy or slow and just not sounding as it should, then the chances are you have a room issue. The Anti-Mode 8033 is a stand-alone system that fits between your processor and subwoofer and has its own calibrated microphone. Setting up "could not be easier", it is said. Priced at £239.95, for further information please go to www.bkelec.com/HiFiSub_Woofer/ant-mode.htm or call B.K. Electronics on +44(0)1702 527572.

COLLOSAL TRUTH

Colisium Developments was formed in April 2008, its philosophy being "to provide only the best in materials and craftsmanship in the hope that the products supplied will be treasured pieces in a system and not something to be discarded after a few years". The Carillon monitor speaker is described as "a speaker with detail, speed and dynamics", and sports mitred cabinet panels, a flush mounted ribbon tweeter and special crossover components. Internal wiring is silver plated copper, as are the rear terminals. For more details, click on colisiumdevelopments.co.uk.
G-SPOT!

Pioneer has five new G-Clef affordable audiophile components, "developed in pursuit of masterful sound quality". The range includes the A-A9MK2-K and A-A6MK2-K amplifiers, the PD-D9MK2-K and PD-D6MK2-K Super Audio CD players and the F-F6MK2-K DAB tuner. Focused on providing accuracy as well as substantial power and stability, the new stereo components are said to achieve "open sound and ultra-quick responsiveness that brings every detail to life". They all sport "silk-soft" hairline finish black aluminium front panels and blue LCD displays, with high quality aluminium remote controls. For further information please visit www.pioneer.co.uk.

CLOSED SHOP

Sennheiser has new closed back HD series headphones, which sport "attractive pricing and sleek styling, excellent sound quality and Sennheiser's two-year guarantee". The HD 218 (pictured) is a £40 closed back design for private listening and portable use, particularly suited to public transport and noisy environments. It has a punchy but not over-bassy sound with excellent clarity in the mids and highs, Sennheiser says. It can also be folded flat for easy storage, and there's a low tangle, single-sided cable. The pricier £50 Sennheiser HD 228 comes in either black or white, goes slightly louder and slightly deeper than the 218s, and features extra soft ear pad cushioning. Vital statistics for these are a frequency response of 18-22,000Hz, an impedance of 24 Ohms, weight of 224g and a cable length of 1.4m. For details, call +44(0)1494 551 551 or click on www.sennheiser.co.uk.

SPOTIFY GO HI-FI

Spotify subscribers are now able to listen to music in "CD quality". Since its first launched last year, all users have been able to listen only at a modest 160kbps, but now it has upgraded to 320kbps using the Ogg Vorbis q9 codec. Spotify claim this is "equivalent to CD quality", although uncompressed PCM is around 1,400kbps. Still, it's currently the highest streaming rate for any digital music service. Premium subscribers are able to enable higher quality streaming by visiting Spotify's preferences menu and ticking the "Enable high bitrate" box. Daniel Ek, CEO and Founder (pictured right) said, "providing great sound quality has always been an important goal for us. Now, we're taking the next step in offering an unparalleled listening experience". See www.spotify.com.

BACK TO BASICS

Following on from the Special Edition Micro 25, Glenn Croft is pleased to announce the launch of two new valve preamplifiers; the Micro Basic and the Micro Basic Line. Both models are based on the same, no printed circuit board architecture as the Micro 25, but with detuned power supply and simpler case construction. The Micro Basic boasts an onboard sophisticated MM RIAA phono stage, and the Basic Line is for those wishing to use just computer, CD or radio. As with all Croft products, they sport point-to-point hard wired components, dual mono controls and "the absolute best sound quality" for just £350 and £300 respectively. For lovers of the LP, Croft Acoustics are also pleased to announce the new £500 "RIAA" stand alone phono stage. Based entirely on the Micro 25, but as a dedicated moving magnet phono preamplifier. For more information, Phone 05601639905 or click on www.cronacoustics.co.uk.

GRAND DESIGNS

Audioplan products are now available in the UK, exclusively through Ikon Audio Consultants. The high end loudspeaker specialist based in Germany has a reputation that spans over twenty five years, making loudspeakers, cables and power products. For more information, click on www.ikonaudioconsultants.com/.

STOP DAB!

Fans of tragic sound quality, awful reception quality and general government waste and profligacy, look away now! Otherwise, why not sign up for Hi-Fi World's campaign to stop DAB by 2015? It's easy to do, just click on http://petitions.number10.gov.uk/switch-off-DAB/ and add your name to the long list of Digital Radio dissidents!

SPOTTED!

Back to the eighties for editor DP and Cambridge Audio's Matthew Bramble, designer of the new 650 series reviewed on p36, as the dynamic duo compare oil leaks from their ageing rusty relics!
REVIEW

There's no one single loudspeaker that does things better than all others, but there are a number of high end designs which seem particularly good in certain ways. Yet the only thing that unites the likes of Tannoy Westminster, Quad 2905s, Martin Logan CLXs and what have you is the fact that they're not conventional box loudspeakers with 'cooking' off-the-shelf drivers.

Now, whilst at the lower end of the market, I'd venture that a pair of decent moving coil drive units (say a cloth dome tweeter and an mid/bass cone make from some variant of plastic or glass fibre) is probably going to give you the best sound per pound, it simply doesn't happen when financially speaking at least - you reach for the stars. Instead, at this price, a degree of innovation is involved, and/or the need to hand-make particular transducers to do the job the designer had in mind.

Vivid design supremo Laurence Dickie walks into my front room, and as he sets foot on the shagpile exclaims, "ooh - NS1000Ms!" He starts to talk about the production processes that Yamaha used to make their Beryllium drive units, and concludes, "they were so ahead of their time". "Interesting," I muse to myself in a Leonard Nimoy sort of way. Here's a loudspeaker engineer with the enthusiasm of a kid in a sweet shop, not your average 'on-message' corporate type with a settled view on life, the universe and everything.

His background is impeccable; he joined B&W back in 1983 after completing an electronics degree at Southampton University. "They wanted an electronic engineer to develop active speakers, which was exactly what I'd been doing in my own time so it was perfect. Actually I was more interested in the speaker part than the electronics and suggested the Matrix system for reinforcing the cabinet which became standard in all their high end models", he told me. "After that John Bowers asked me to get involved with work he'd begun, which focused on removing cabinet effects using cone drivers on an open resistive baffle. It became quite clear that once you'd removed the internal resonances and external diffraction effects of typical square boxes the driver material became clearly audible. So I resolved to make a system in which the drivers remained pistonic and an enclosure which was free of resonances or reflections. For
the drivers I used a 50mm aluminium dome for the crucial midband and for the rear enclosures found the best performance from exponentially tapered tubes. The result was Nautilus.”

Yes indeed, this is the man behind B&W’s epic statement loudspeaker, the stuff of latter day legends. Not that you’d know this from casual conversation with him you understand, as Laurence is far more interested in talking about what’s possible, how differing approaches do things well (and not so well), and the way forward for the loudspeaker world, than his not inconsiderable wealth of previous design experience. Over lunch, we chat about materials technology, plasma tweeters, the problems of ported loudspeakers and his beloved contoured cabinets. Although never coming over as an ideologue or a zealot, he’s not the world’s greatest diplomat, noting than many “big name” high end loudspeakers are more about marketing than the appliance of science...

An engineer through and through, he came to Vivid via his B&W connections, but with the original idea being “simply fitting OEM drivers in our own enclosures... I felt this would be no fun and if they were going to be serious that they should consider making their own drivers”, he told me. “It happened that in the years after leaving B&W, I had been developing a set of drivers which, while originally intended for use in high power studio monitors, were ideally suited to high-end domestic audio. The next four years were spent perfecting those drivers and developing the cabinet shapes. We quickly outgrew the garage where production started in 2004 and moved into our Durban factory in 2005, where we still manufacture all our enclosures and drivers from raw materials and machined parts. We've made about 2,700 loudspeakers to date”.

He describes Vivid Audio, which was officially registered in 2004, as “a design and engineering led company”, adding that, “the flow of ideas is very much in one direction – from designer to end user. To that extent the object which ends up in front of the listener is very pure. I feel a personal connection with each piece that ends up in a person’s listening room”.

The first Vivid design, the B1, is a largish (1.095x265x375mm including integral stand) standmounter weighing a hefty 38kg each. It's a three and a half way design, with two bass drivers being used, the one on the front baffle being directly coupled to the second on the rear. This technology dramatically reduces the amount of mechanical energy given off by the enclosure, it's claimed.

The injected carbon fibre reinforced polyester cabinet is designed to be as dead as possible. “Initially the idea was to make the enclosure by first building a wooden matrix with front and rear baffles attached and then bending two carbon fibre reinforced sheets onto this support and joined at the top and bottom apexes”, Laurence says. “This would have been quite workable but the design was a bit restricted by the materials. Then we were introduced to a local polymer concrete manufacturer and immediately we realised that if we were to mould the enclosure it would give us complete design freedom. The material itself was just right for the job and the addition of... work above 100Hz. Fortunately it's quite simple to decouple the drivers from the cabinet above 100Hz by floating them on silicone o-rings. Three separate ones are used to decouple each of the two dome drivers from the enclosure and from the tapered tube absorbers. So in the same way as the B1 has bass drivers front and back it also has a pair of reaction cancelling ports”.

It's not just the novel cabinetry and the clever way the drivers are mounted which deserves attention though, but the fact that all three transducers are ‘material matched’, using a magnesium/aluminium alloy, and the tweeter and midrange driver share a similar dome profile to give true phase coherence. Laurence takes up the story, “actually there's very little to choose from between aluminium, magnesium and titanium in terms of density to modulus ratio, but in the end I chose 5052 aluminium/magnesium alloy because of many reports from the pro field that titanium never sounds so

"for those who share my own personal sonic proclivities, this has to be one of the loudspeaker greats..."
wound inductors hard wired onto drilled boards, Laurence told me that "we fully expected to get the production items from one of the well known OEM suppliers. They duly sent samples which did look the part of course. All very well built with their machine wound inductors mounted on professional looking PCBs - except they just didn't sound the same. To this day we still hard wire the components and we still wind our own inductors."

The result is a beautifully built and finished loudspeaker costing £10,500 per pair (in Graphite, Oyster, Sahara, Pearl and Copper paint finishes, with additional colours for an additional cost of £615). That distinctive shape is not, as has been reported, based on a Zulu shield, but "is driven by the same logic which gave rise to Nautilus, namely that the baffle should be just the width of the drivers it supports surrounded by a generous fillet. The critical area around the mid and tweeter units is smoothly contoured for the benefit of the emerging sound field. The further you go from the tweeter the more artistic license you have with the design but in the case of B1 the guiding principle was that of symmetry so the bottom of the cabinet mirrors the top as the rear does the front", Laurence told me.

**SOUND QUALITY**

As you'd expect of a loudspeaker with unique and usual drive units in bespoke cabinets the like of which you don't see anywhere else, the Vivid B1 is a distinctive performer, inasmuch as it doesn't do what so many other designs at the price do. By this, I mean many others somehow manage to lose the natural timing, tonality and/or phase coherence of the original recording. Instead, the Vivid B1 brings you largely unknown pleasures - those coming from hearing the music in a 'direct coupled' manner. Temperamentally this loudspeaker is no shrinking violet. It's not the sort of thing you buy to put on the end of any old assemblage of components, in the hope that it will somehow make a nice noise. Indeed, if you do this, it highly likely won't. It is relentlessly revealing of the source and amplification, telling you in a matter of fact way what's wrong with them. In this respect they're eerily similar to Yamaha NS1000Ms, which can sound like ten different speakers given ten changes of source or amp. The Vivids do this too - so they're a speaker you'll have to 'commit to', just like you would/should a marriage. And they'll prove endlessly rewarding if you tie the knot...

All drivers have their own patina, from Martin Logan electrostatic panels to Lowthers, and the sonic signature of the Vivid B1 is bright and spry. Indeed, to those used to the inevitable squawkery emanating from average plastic drivers of all descriptions (trendy names or not, as the case may be), the Vivids are nothing less than bracing. Rather like walking out on a beautiful bright and crisp winter morning, the music arrives brilliantly lit and with vibrant definition and dazzling colour. Switch to the likes of the similarly priced B&W 801D, and things became more nasal, more quacky, more monochrome, while the Quad 989 seems soft and silky but as veiled as a smoggy city sunset.

Annie Lennox's breathtaking cover of 'Don't Let it Bring You Down' showcases the Vivid B1's wonderful clarity. Her close miked vocals were carried with complete immediacy, as if you were in the vocal booth with her. Yet there was utter cohesion; as her voice went up and down the scale, there were no odd phasey artefacts to be heard, and when she went louder there wasn't so much as a whiff of distortion, harshness or sibilance. Meanwhile, behind those exquisite vocals, the track's expansive instrumentation pushed things along, the B1's rendering the backing analogue synth glides with complete believability. Hi hats sparked like ships in the night, snare drum pan rolls thumped the verse-chorus bridge transition home and gentle backing electric piano twinkled up and down, in and out of the mix.

Simply Red's 'Fairground' was no less captivating. This song gets most speakers to simply issue you with a long list of what they're doing wrong, as they stumble and fall whilst trying to keep up with the complex (and slightly dissonant) backing rhythm track. It's that heavily processed thumping bass drum that does it for your average big box, but the Vivids didn't so much as raise an eyebrow in Roger Moore-esque repose. They impressed me most was the dynamic accenting throughout the choruses. It was plain to hear that the singer was extending himself, using every foot-pound of pressure in his fast emptying lungs. Sit on dynamic transients, the Vivid B1s do not!

Skilful though these loudspeakers may be with processed, compressed chart pop, it wasn't until I moved to the avant-jazz strains of Rain Tree Crow's 'Pocket Full of Change' that I really became aware of what these could really do. The opening percussion came over with the speed and agility of a duelling sword, and a satisfyingly metallicclang. Hi hats sounded beautifully realistic, with a pure 'zing' that you just don't hear from hi-fi speakers very often, and they timed so sublimely too. There's such little overhang from the Vivid's metal drivers that the instruments simply stop when they're supposed to, rather than entering into a seemingly endless spiral of tiny aftershocks. The result is so much space around instruments in the mix, and also a wonderfully insightful idea of the performers' most subtle rhythmic nuancing. Such was the purity of their sound that it was plain for all who could care that the Rain Tree Crow project was of course Japan (the band) by any other name.

Indeed, as the track moved on, in came vocalist David Sylvian with his trademark David Bowie/Bryan Ferry soundalike quality. Once again the Vivids conveyed his voice with magical ease, this time a little
harder and more edgy than in his late-period Japan days, but with all its rich, dark chocolatey velvet intact.

The sudden realisation that I hadn't thought about the BI's bass momentarily stopped me in my tracks. It's what I normally hear first in a speaker; about 10ms after the first note of the song is struck, I am fast forming an opinion about its cabinet and/or bass port. But with the Vivids this is very hard to do. The solitary sound of a bass guitar string plucked proves quite odd, as despite the porting (which regular readers will know I'm not a passionate advocate of), I really couldn't hear the cabinets at all. I couldn't hear bumps, thumps, thurms, buzzes, hisses, chuffing, or anything else for that matter; except the bass drum and guitar. And as the bassist went up and down his fretboard, there was no magical 'sweet spot' when things got much louder as the cabinet started vibrating like a Hotpoint on maximum spin speed, or the port started chuffing like a steamboat funnel. Amazingly, here is one of the very best implementations of reflex loading I've ever heard. Great to hear, but I'm afraid it will make listening to almost every other ported loudspeaker even more arduous...

Brilliant as the Vivids proved with jazz and pop, it's as if they were saving themselves for classical. All those great qualities, ones which to me personally are closer to 'heroic', of speed, transparency, grip, neutrality and phase-coherence made my time of speed, transparency, grip, neutrality of speed, transparency, grip, neutrality and phase-coherence made my time listening to my fave DG recording of Beethoven's Pastoral symphony (Karajan, Dresden Philharmonic) quite unforgettable. The magic served up by the marriage of those tweeters and midband drivers, and the way that they work with the cabinet, makes strings a joy. Every last sinewy ounce of the violins was served up with breathtaking clarity; stark, explicit and unsullied, the BI has tremendous tonal accuracy. Yes, although there was that trademark brightness you get from metal drivers, but conversely there was no high end 'sting', which shows in-room energy which is that there isn't all that much of it. The BI does not go down low in the way a similarly sized floorstander does, for example. Its bass is brilliantly articulate and tuneful, but you simply don't get an immersive low frequency experience. This is for better and for worse, as many live in houses where this is simply not domestically acceptable (from a neighbour or spouse point of view). The Vivid BI lets you hit the loud pedestal and run high levels of very clean and engaging sound, without telling everyone else in the street about it.

CONCLUSION

Loudspeakers are impossibly difficult things to gauge. Three very well engineered but different designs can elicit three highly divergent opinions. As for me, I know what I like, and what I like centres around clarity, incision, speed, dynamics and phase coherence from top to bottom. That's why I've ended up with Yamaha NS1000Ms, which are at the top of this particular game, and also adore the Martin Logan CLX, Apogee Synergy 1.5 and Usher Be-10. Well, to this little list I must add the Vivid BI. They're an altogether smaller scale speaker than the aforementioned, but are no less entralling a listen. As well as any of these greats, they give you that 'direct-coupled', brain-plugged-into-the-mixing-desk sound. Just so long as you know what you're buying in to, they have very few flaws (and these are relatively insignificant), which makes the BI an incredible all round package for those with small to medium sized rooms. For those who have their own personal sonic proclivities, this has to be truly one of the loudspeaker greats.

REFERENCE SYSTEM

Sony TT-S8000/OL Silver/Ortofon Winfield turntable
Icon Audio PS3 phono stage
Sugden M14 integrated amplifier
Audio Research VS160 integrated amplifier
MF Audio Passive Pre/Ne Force Ref 9SE pre/power
Yamaha NS1000Ms loudspeakers
Quad 989 loudspeakers

VERDICT

Breathtaking transparency, superlative coherence, dizzying speed and an unyielding musicality all conspire to make one of the best compact loudspeakers currently made.

VIVID B1

£10,500

Vivid Audio

www.vividaudio.com

MEASURED PERFORMANCE

Our published frequency response analysis, using a stepped, gated sine wave signal, clearly shows the Vivid BI to be very flat right across the audio band with none of the usual treble emphasis seen in so many modern loudspeakers. Look closely, however, and it is apparent that the dome midrange unit is prominent from 1.5kHz up to 5kHz and, in conjunction with increased acoustic power from wider dispersion over cone drivers, the BI will have a forward and perhaps 'obvious' midband. It certainly will not lack presence, that's for sure and 'obvious' midband. It certainly will not lack presence, that's for sure and... Bass output is fairly constrained; even a third octave analysis of pink noise, which shows in-room energy buildup, confirms limited low bass, the lower limit being 60Hz (+6dB). However, this does mean that the BI will sound well damped and the port peaks at 35Hz to add in some bottom end weight. Output from the port is limited however, measuring just +2dB on forward response at 80Hz, although there are two ports.

Impedance measured 6 Ohms and sensitivity a normal enough 87dB from one nominal watt (2.8V) of input.
LET THERE BE CHA'AM

emille
just for your musical bliss
Not everything in hi-fi has got better, but of late CD players have put on a spurt. Just as vinyl took a quantum leap forward in the autumn of its life (the nineteen eighties), so Compact Disc is repeating the trick now as it reaches its twilight years.

Actually, there's a strong case to be made that, with a few notable exceptions, CD transports have got worse. As more and more CD disc spinners use DVD-ROM derived mechanisms, so there's a sense that standards are actually slipping in this department slightly. However, the latest generation of 24bit, 96kHz (or 192kHz) DAC chips - complete in many cases with upsampling - have sweetened the pill. My regular chats with mastering engineers have revealed that one of the most improved areas of technology available to them is the humble digital to analogue convertor.

So what better way to upgrade your ageing CD spinner than with a new DAC? Providing a replacement pick-up mechanism is still available for your machine if the worst happens, it makes sense to upgrade only the part of the player that's letting the side down. And an additional bonus you get when buying a DAC is that it could also transform the sound of your DVD player, Sky box or even DAB radio. Many new DACs can even make your computer sing too, via the built-in USB connector that's becoming ever more popular. So this test sees a round up of products from £125 to nearly nine times that, in a bid to see if more pounds buy you superior sound.

Looking to upgrade your ageing Compact Disc player? The simplest course of action is to buy a superior DAC, but which to choose? Paul Rigby tackles seven under £1,000...

The CONTENDERS

Russ Andrews Fubar II USB £125
Musical Fidelity V-DAC £170
Beresford TC-7510 £187
Cambridge Audio DacMagic £229
MGL Symphony DACPre £345
Stello DA100 Signature £675
Benchmark DAC-1S £930

REFERENCE SYSTEM

Cyrus CD-Xt SE CD transport
Aesthetix Calypso preamplifier
Icon MB845 Monoblock power amplifiers
Quad ESL-57 loudspeakers (One Thing modified)
RUSS ANDREWS FUBAR II USB £125

The test starts with this very humble USB-only DAC, running up to 16bit, 48kHz sampling rate with no fancy tricks like upsampling. It's an unashamed budget box that spans a little over 50x80x105mm, so is small enough to be placed almost anywhere. Inside, it sports a Burr Brown PCM1702 DAC chip, not that you’d ever know with its racery red ribbed gunmetal casing (although a limited edition grey version is available, however).

The fascia has no controls however, and only three lights are present including power, ‘suspend’ and another for ‘playback’. The rear of the case includes a simple on/off switch, USB connector and DC power slot. The Fubar has been designed with computer use in mind, with plug and play functionality.

**SOUND QUALITY**

All sound tests were based on a PC running WAV files that began with The Sugababes' 'Stronger' from the 'Angles With Dirty Faces' album. Immediately, the default sound — an admittedly reasonable noise from my Creative Audigy soundcard — was lifted over every frequency providing a universal sonic improvement, fine bass punch and real insight for such a diminutive, low priced box. The problematically excessive peak limiting shoe-horned into the mastering is present here, the brightness hitting you square in the eardrums somewhat, reducing long term enjoyment. Can’s ‘Yoo Doo Right’ from ‘Monster Movie’ displayed a transparent performance, as the Fubar II strips all instrumental colour, laying the music bare. While this adds to the ‘truth’ of the rendition, the Fubar II can be accused of excessive enthusiasm, like a Beaver on speed attacking the bark of a tree. That rather bright image is not suitably recompensed with enough detail and information...

Playing Carol Kidd’s ‘Dreamsville’, and ‘A Nightingale Sang In Berkeley Square’, and you realise where the Fubar II’s spiritual home lies – jazz. In contrast to the rather fatiguing rock tracks, Kidd’s warm vocal backed a discerning bass that was lifted and posed to the ear, displaying those difficult to reach lower tones that are sometimes obscured in the mix. As for the piano? Well it positively cavorted across the soundstage.

The finely picked acoustic guitar solo secured an admirable midrange performance, that was also complemented by a light and airy treble.

The Fubar II should really be judged within its computer niche, because when it’s shoved up against quality hi-fi kit, it does suffer in its lack of connective adaptability and monochrome sound. That said, it certainly gave a good account of itself and should be seriously considered for those computer users looking to improve their basic hardware.

**MEASURED PERFORMANCE**

The Fubar identifies itself after a USB handshake as a Burr Brown PCM1702. It works up to 48kHz simple rate and 16bit resolution the manufacturers say, but it accepts a 24bit word we found distortion drops from a high-ish 0.4% from 16bit to 0.16% from 24bit, so there’s some benefit to using higher bit depths in spite of the 16bit spec., and mediocre 16bit performance. Although not up to best CD DAC standards the Fubar manages competently with 16bit, fully resolving a -80dB signal and giving better results from a -80dB dithered signal, returning a very reasonable 3.2% distortion figure. With low noise and no large quantisation products EIAJ Dynamic Range was fair at 104dB, a peculiar noise spectrum having impact here.

Our frequency response analysis shows the Fubar is flat out to 21kHz and very accurate in this area, so although small and not purposed for traditional hi-fi components it has a hi-fi performance. Output was spot on the Philips standard at 2V exactly.

The Fubar gives good results and...

---

**VERDICT**

Fine entry level computer-only DAC, but not strictly an audiophile hi-fi product however.

**FUBAR II USB** £125

Russ Andrews
(C) +44 (0)845 345 1550
www.russandrews.com

**FOR**
- insightful
- detailed bass
- low price

**AGAINST**
- a tad bright
- limited tonal palette
- USB only

---

**GROUP TEST**

16 SEPTEMBER 2009 www.hi-fiworld.co.uk
MUSICAL FIDELITY V-DAC £170

The first real hi-fi DAC of the group, this is small in stature at just 40x95x155mm, and comes stripped of extraneous buttons, while the sturdy chassis is very simple in form. Lurking within is a modern Burr-Brown DSD 1792 chip and a SRC4392 upsampler. The orientation of the casing is a little odd, it is no front-to-back reference to the V-DAC, the lines of operation run left-to-right. So, on the left is a pair of phono outs whilst, on the right, is a USB port, a coaxial input and a switch to toggle between them. You also get an optical S/PDIF input and a DC power connector.

SOUND QUALITY

The V-DAC performed superbly given its modest price and packaging, meaning that so much more music was allowed to flow forth from this simple box than the Fubar USB-only design. Indeed, its nature rather reminds me of the wonderful Acoustic Energy Reference One loudspeakers in its clear, concise sound. It's a low distortion design for sure, and this was best illustrated playing the Sugababes' track which produced none of the usual vocal sibilance that was heard via the Fubar II for example, whilst any harsh treble tones were absent. Yes, the track is damaged via excessive peak limiting and the V-DAC can't do anything about that, but its design makes the track's rather 'offensive' character at least bearable. In fact, it even allowed the few positives of the recording to emerge, such as the meaty bass and impressive instrumental separation.

Can's drum-heavy track sounded impressive, revealing a cavernous yet sensitively organic bass drum to flower, and there was oodles of midrange detail with the DAC picking out relatively subtle analogue synth noises. Carol Kidd's jazz track was similarly impressive, bringing a bucketful of clarity to an already polished presentation that quickly sat next to a confident midrange. It's not quite as polished as the higher end products here, but the V-DAC still doesn't keep reminding you how cheap it is.

Via the USB input, the WAV source tracks still offered a wide soundstage and deep, rich tones. Can's track remained organic with midrange showing greater finesse than the Fubar II. Finally, the wonderfully balanced performance of Carol Kidd was accompanied by a vivid midrange that added to the general musicality of the product.

This isn't just a good DAC at the price, it's a great one. It had me scratching my head at how Musical Fidelity can produce something so good for so little money.

MEASURED PERFORMANCE

The V-DAC has a small roll down in high frequency output, just enough to ensure there's no treble 'spit'. This pulls the upper response limit from 21kHz to 20.7kHz, a minuscule and inconsequential reduction. The result was identical on S/PDIF and USB and will give both a balanced and smooth presentation.

Linearity was best of the group with 24bit code via S/PDIF, distortion dropping to just 0.015% at -60dB, showing what an improvement higher resolution can make via a high quality DAC. From normal 16bit code, distortion measured a still very low 0.2% and EIAJ Dynamic Range was commensurately very high 113dB - again best of the group and also comparable to the best hi-fi DACs available. USB gave slightly worse results, as it did with the other DACs, 16bit distortion rising to 0.3%, and 2bit 0.15%. Output was normal at 2.1V, channel separation high and noise low.

The V-DAC measured very well all round, via S/PDIF and USB, offering the best results within this group. NK

VERDICT

A budget tour de force, and no mistake! A smooth, open, low distortion sound without the nasties normally expected at this price.

MUSICAL FIDELITY

V-DAC
Armour Home Electronics
© +44 (0)1279 719944
www.armourhome.co.uk

FOR
- low distortion
- bass power
- clarity
- midrange detail

AGAINST
- nothing at the price
BERESFORD TC-7510  £186.29

This DAC resembles a miniature amplifier, its casing spanning 40x245x110mm, and whilst somewhat basic it can still be described as sleek looking. This black box is unassuming, a welcome design tone indicating a sense of confidence. Internally, a Class A analogue output stage is said to help reduce crossover distortion, while a ‘virtual’ DC power supply covers varying voltages. The front fascia features a selection of neat yet small brass button selectors to key in two coaxial, one optical and one USB input. A power button and volume control are also present. At this price point it was somewhat surprising to see a headphone socket too. The rear offers two sets of analogue outputs, two coaxial inputs, a USB port and optical input plus a DC power connector.

SOUND QUALITY
Playing the Sugababes track, the Beresford revealed an immediately incisive but sometimes clinical sound. As such, this DAC produced a highly transparent rendition that revealed subtle tonal characteristics, especially within the lower bass area. The excessive peak limiting of this track was evident but not too severe, and while the soundstage was a little shallow and showed a relative lack of musically compared to the V-DAC, its superb transient attack produced a punchy performance that was fun to listen to. The naturally transparent character of the midrange was even more impressive on the well mastered Can song, where the notable transient speed was even more effective on this drum-heavy track, whilst retaining the Musical Fidelity’s more organic interpretation.

Moving onto Carol Kidd’s easy-going performance, the Beresford served up a very clean sound that was a touch more strident than the V-DAC. Although the Beresford did add a greater degree of transparency, it also on occasion did threaten to tip over towards sounding sterile. Kidd’s rendition was delivered with a broad sweep along a wide soundstage, which came as a slight improvement over the V-DAC in this respect at least. Plugging the USB cable into the TC-7510 proved an enjoyable exercise, as on the Sugababes track, the soundstage offered an impressively three dimensional picture and a wholly clean vocal performance, but without the bass power of the V-DAC

or indeed its silky, distortion-free presentation. Moving onto Can, who are always slightly grubby long-haired layabouts, and via the Beresford they appeared to have taken a long shower prior to a quick visit to the barbers. A clear, clean interpretation offered sparkling midrange and treble, and these qualities transferred easily to the Carol Kidd track where the treble was particularly light and airy while Kidd’s voice provided a subtly nasal quality.

An interesting contrast to the V-DAC, this offered more light and shade, providing an effective alternative to those wanting more transparency and insight in their music, although tonally it wasn’t as agreeable.
CAMBRIDGE AUDIO DAC MAGIC £229

This new incarnation of the Cambridge Audio classic offers a friendly design with a brushed aluminium case, measuring 50x215x190mm. You can even stand the chassis on its end, just to be contrary, placing it within a low profile rubberised stand. The power, unlike the other DACs seen here, is supplied by an external 'wallwart'. Accompanying the dual differential Wolfson WM8740 DACs, the chassis front features an on/off switch, a three-source selector plus a filter/phase selector. A handy row of sample rate lights complete the frontal offering. Apart from the DAC Magic, there are plus a phono and optical output. Its switchable filter rates I am sure will seduce some in the showroom, but I can't say I found them terribly useful - more of a pointless distraction, in fact!

SOUND QUALITY

After a good deal of faffing around, I settled on the 'Linear Phase' filter as the best of the worst, and duly spun up the Sugababes' track which immediately exhibited a sound quite different to both the V-DAC and Beresford. The Cambridge offers an impressively grand soundstage - majestic even. Listening to this little box of tricks, you feel that you really should get dressed up for the occasion because that's what the DacMagic provides - a live gig magnificence. For worse, doesn't have the obvious musicality (especially on USB) but for better and for Worse, doesn't have the obvious character of other products here.

PLAYING ORCHESTRA

Playing Can, you get the feeling that the Cambridge is a Jack of all trades but a master of none. This is not a derisive comment; rather I feel the DacMagic might not excel at any one particular area of musical presentation, but sounds good all round. Its bass is present and quite forceful, whilst midrange gives you the information you need, and its treble is lively and expansive. Still, no one single aspect of the musical spectrum grabbed me by the throat, unlike both the V-DAC and Beresford. Similarly, The Carol Kidd track was a bit of a mish mash. Despite the musicality, the acoustic guitar solo was a little muddled and midrange bloom tended to fill in the more complex areas yet the vocal was effortless and well portrayed.

Turning briefly to the USB source, the DAC offered a broad soundstage with a sometimes muddled bass via the Sugababes, but was much happier on the well mastered track from Can where it profited from a fine midrange. Indeed, in many respects the DacMagic was more impressive responding to a USB source than a CD source.

This mysterious little box is feature-packed and works very well (especially on USB) but for better and for worse, doesn't have the obvious character of other products here.

MEASURED PERFORMANCE

The DAC Magic has a wide, flat frequency response with CD our measurements show and there was almost no change at the three filter settings, as on the first sample. Both Min (minimum) and Lin (linear) Phase both gave a very sharp roll off at 20.1kHz with no sign of stop band ripples or throwups. The steep setting, shown, curtained response just a fraction, to 19.8kHz (-1dB) but did not affect pass band response, so sound quality differences will not be attributable to changed response shape. Flat frequency response as shown usually gives a bright balance from CD. Output extended to 24kHz with a 48kHz sample rate signal and USB gave identical results to the optical input, only distortion increasing slightly to 0.35% from 0.2% from 16bit code. This is still a good result and shows the DacMagic works well with computers and portable players.

From CD distortion levels were as low as the best converters available, a figure of 0.2% at -60dB being as good as it gets with 16bit resolution. As a direct result EIAJ Dynamic Range measured a very high 114dB, so the DAC Magic should sound clean. With 24bit code distortion dropped to a low 0.04%. Output was normal at 2.1V via the unbalanced phono outputs and 4.2V from balanced XLR. Measured performance from XLR was otherwise similar to the phono output.

The DacMagic gave an impressive measured performance and is an imaginative design. NK

Frequency response (-1dB) CD 4Hz-20.1kHz

Distortion (%) 0dB 0.0005 -6dB 0.0008 -8dB 0.2 -9dB 4.5

Separation (1kHz) 112dB Noise (IEC A) -115dB Dynamic range 114dB Output (bal) 2.1(4.2)V

VERDICT

£229

For - grand presentation - feature-rich - musicality

Against - fiddly filters - occasionally bland
MGL SYMPHONY MINI DACPRE £345

Compared to the other DACs reviewed, the Symphony is almost industrial in its aspect. The case is big and bold and rather hulking. The control fascia is dominated by two control knobs that look as though they were designed for men who work on oil rigs. One is a volume control, the other a six-source input selector. You also have a power switch and headphone socket. In addition to the Wolfson DAC chips within, the rear features two coaxial inputs, two optical inputs and two sets of phono line in. You also get a set of phono outs and a set of mini-DIN outs and a figure-of-eight power cable. A USB port is available via an optical port converter, but this wasn't supplied with the review model. Additional input and output modules are available at extra cost. Options include an upgraded power supply for £51, balanced outputs for £85, two sets of analogue inputs for £64, a remote control that will set you back £51, transformer isolated digital inputs for £34, an 12S digital input for £42 – or you can buy a ‘Plus Package’ containing everything but the 12S input for £198 (pound equivalents of Euro originals).

SOUND QUALITY

With no USB port, the sound tests were wholly devoted to the CD source. The initial impression after spinning the Sugababes track, was of an intriguing mixture of fine midrange detail (though not quite as impressive as the V-DAC) and a grand presentation à la DacMagic, although not with that same degree of depth. In fact, the mids seemed enhanced because of that impressive soundstage which seemed to offer them space and time.

Similarly, there were the same array of ‘goods’ and ‘nearlies’ with Can’s finely mastered and drum-heavy track. Comparisons with the V-DAC and Beresford were not particularly good for the Symphony, lacking as it did the organic nature of either. There was no real bass heft present, nor was there much in the way of drama. Bass was rather on the polite side, although the Symphony still produced a nice clean treble and upper midrange which was suitably silky.

That smooth midrange and treble performance was highlighted with the jazz-inflected Carol Kidd, whose vocal performance was wholly attractive and suitably feminine. In fact, the Symphony appeared to much prefer the jazz pathway. Its combination of midband detailing and polite bass response was highly effective here. This DAC tips-toes around the rock firmament whilst welcoming jazz with open arms.

MEASURED PERFORMANCE

The MGL has some unusual characteristics, one of which is a restricted upper frequency response limit of 16kHz (-1dB), instead of the usual 21kHz imposed by the anti-aliasing filter of a 44.1kHz sample rate system. Subjectively however, this does remove some upper spit from CD and isn’t necessarily perceived as a bad thing in practice; Chord Electronics DAC64 had such a limit and didn’t suffer. The lower limit of this DAC is also limited to 10Hz, where most reach 2Hz. Our analysis has an up tilt at the low end (left) due to the presence of a little hum - inaudible but it should not be there all the same.

Distortion at full level (0dB) was excessive, measuring 3%. At -6dB it was still unacceptably high at 0.8%, where 0.001% or so is expected. At -60dB it was still on the high side at 0.25%, with a figure of 0.33% from 24bit via USB - a peculiar result. Output was normal enough at 2.4V.

The MGL suffers all round from a poor measured performance by audio standards; high distortion being most worrying. It can only be justified by its functionality. NK

FREQUENCY RESPONSE
STELLO DA100 SIGNATURE £675

This is something of a favourite of ours, since we first reviewed it in the August 2008 issue of Hi-Fi World. The Stello is fully equipped, looking and feeling like a proper piece of hi-fi. There’s a standby button and attendant light along with a five-source selector plus an upsampling button that, after tests found that sound was improved with it on, was left activated during the review. The rear of the chassis, measuring 212x55x290mm, packs in an IEC power socket, two phono outs, balanced outs and AES/EBU, coaxial, optical and USB port along with a power switch. There’s also a rare I2S connector to enable an accurate, jitter-free connection to the matching Stello CDT100 transport. Inside, a discrete Class A analogue output stage and large toroidal transformer rated at 25A can be found.

SOUND QUALITY

The first impression of the Stello upon spinning the Sugababes track was of a rather crisp and detailed sound that, whilst not bright, did nothing to hide the excessive peak limiting distortion from this track. Whilst not quite the most transparent DAC in the test, bass performance was very impressive, sounding both atmospheric and detailed. There was a rare sense of air around those lower registers that did provide a welcome dynamic dimension to the midband. This was further improved when the balanced outputs were used.

Playing the Can track, again the bass detail impressed and gave this drum-lead piece real excitement. Although lacking the upper register incision of both the Beresford and the clarity of the V-DAC — being not quite as immediate — the Stello did surprise with its drive and dynamics. It also picked out the rather subtle analogue synch warbling rather well. Carol Kidd’s vocal strains sounded particularly mature as the lower midband elements in her voice were presented well, accentuating just how significant and essential she is to the jazz vocal scene. Although not quite as explicit as the V-DAC, the Stello’s midband maturity did aid the overall balance, something that would welcome.

Connected to a USB source, the Stello continued its thumping bass response which was both full and rich on the Sugababes track with a wide soundstage and well modulated vocals. Similarly, the Can track produced an impressive drum-based performance which, although less musically entralling than the V-DAC, was still fiercely punchy. That bass performance continued to the double bass on the Carol Kidd track, the detailed tracking of the acoustic guitar solo was similarly striking.

Although not as lyrical sounding as the much cheaper V-DAC, the Stello performed very well with music that utilised complex or tonally interesting lower registers, showing a notable command of this frequency area whilst also integrating a noteworthy dynamism. A very powerful performer, then.

VERDICT

Finessed sounding DAC with strong driving bass and plenty of atmosphere.

STELLO DA100 SIG. £675
Select Audio
+44 (0)1900 813 064
www.selectaudio.co.uk

FOR
- dynamic articulation
- bass weight
- refinement
- connectivity

AGAINST
- nothing at the price
BENCHMARK DAC-1S £930

This is the most expensive DAC in this round-up, and the most professionally designed of the bunch. By this I mean 'studio professional', which shows the company's pro audio roots. It's well made, sturdy and solid whilst looking like it can take the knocks and last the distance. Measuring 450x200x210mm, the Benchmark provides enough presence to be noticeable but not enough to dominate. The fascia, featuring a cut-out design that some might consider stylish, includes a nicely balanced and handy stepped volume control — the only example of such here — along with two headphone sockets and a coaxial/XLR/optical selector. The rear of the case includes a wealth of options including an IEC power slot, a pair of phono outputs, a pair of balanced outputs, a variable/calibrated selector, a coaxial input, an optical input plus another supporting XLR.

However, unlike the DAC1 USB reviewed in the February 2008 issue of Hifi World, there's no USB port. Inside, the box features UltraLock technology, designed to reduce jitter along with a large toroidal transformer and neat, surface mounted componentry to reduce the signal path between each chip.

SOUND QUALITY

Along with the V-DAC, the Benchmark made me sit up and take notice, dragging me out of my slumbers with superb bass control, explicit midrange detailing and a routinely musical demeanour. Playing the Sugababes track, despite a slight increase in perceived harshness when compared to the V-DAC that did place some emphasis on the peak limiting, the Benchmark impressed with its fine control of bass. In fact this DAC took hold of bass like a lion handles a dead zebra. The Benchmark shook it until the bass realised that the DAC would do whatever it damn well pleased!

The immense low frequency control carried over to the Can ditty. In fact, as this piece features a superior master, the bass detail was far better nuanced. It was as if each sub-particle of each tone was taken, examined and carefully considered before being released to maximise the production. The tremendous sense of realism carried over to the Carol Kidd CD, where Kidd's vocals featured a delicate sheen and femininity that added to her performance by imparting a touch of vulnerability. The midrange was best represented by the dynamic acoustic guitar which screamed 'Steel!' and the treble tinged cymbals stretched through space and time. The Benchmark was as at home with this rather precise and considered jazz piece as it was on more driving rock.

Considering its still fairly modest price in the great scheme of things (well, a Chord QBD76 costs three times as much!), this is a superb digital-to-analogue conversion tool. But isn't it interesting that to my ears at least, it took a DAC costing almost a grand to match the V-DAC in terms of musicality? Sad that, but the Benchmark did perform brilliantly. In fact, upon spinning any CD, it takes but a few seconds for you to realise that it is money well spent.

MEASURED PERFORMANCE

The DAC1 has a wide, flat frequency response with CD, our analysis shows, and this is one of its respective properties that gives a fairly obvious treble and the sheen common to CD, so the DAC1 will add no warmth.

Distortion levels were very low throughout the unit's dynamic range, a figure of 0.18% at -60dB being as good as it gets with 16bit resolution from CD. As a direct result EIAJ Dynamic Range measured a respectably high 111dB, so the DAC1 should sound clean enough in use with CD. With higher resolution 24bit code distortion dropped to just 0.03% through S/PDIF, again as good as it gets, so the DAC1 is very linear and up amongst the best in this respect.

Output was normal at 2V via the balanced XLR output sockets. It is common for the-balanced output to be double that of the unbalanced, although it does not have to be when balanced output line drive amps are used. It's best to use higher voltages for lines to better resist interference and noise so this result is a surprise. Measured performance from the DAC1 is very linear and last the distance. Measuring 450x200x210mm, the Benchmark provides enough presence to be noticeable but not enough to dominate. The fascia, featuring a cut-out design that some might consider stylish, includes a nicely balanced and handy stepped volume control — the only example of such here — along with two headphone sockets and a coaxial/XLR/optical selector. The rear of the case includes a wealth of options including an IEC power slot, a pair of phono outputs, a pair of balanced outputs, a variable/calibrated selector, a coaxial input, an optical input plus another supporting XLR.

However, unlike the DAC1 USB reviewed in the February 2008 issue of Hifi World, there's no USB port. Inside, the box features UltraLock technology, designed to reduce jitter along with a large toroidal transformer and neat, surface mounted componentry to reduce the signal path between each chip.

SOUND QUALITY

Along with the V-DAC, the Benchmark made me sit up and take notice, dragging me out of my slumbers with superb bass control, explicit midrange detailing and a routinely musical demeanour. Playing the Sugababes track, despite a slight increase in perceived harshness when compared to the V-DAC that did place some emphasis on the peak limiting, the Benchmark impressed with its fine control of bass. In fact this DAC took hold of bass like a lion handles a dead zebra. The Benchmark shook it until the bass realised that the DAC would do whatever it damn well pleased!

The immense low frequency control carried over to the Can ditty. In fact, as this piece features a superior master, the bass detail was far better nuanced. It was as if each sub-particle of each tone was taken, examined and carefully considered before being released to maximise the production. The tremendous sense of realism carried over to the Carol Kidd CD, where Kidd's vocals featured a delicate sheen and femininity that added to her performance by imparting a touch of vulnerability. The midrange was best represented by the dynamic acoustic guitar which screamed 'Steel!' and the treble tinged cymbals stretched through space and time. The Benchmark was as at home with this rather precise and considered jazz piece as it was on more driving rock.

Considering its still fairly modest price in the great scheme of things (well, a Chord QBD76 costs three times as much!), this is a superb digital-to-analogue conversion tool. But isn't it interesting that to my ears at least, it took a DAC costing almost a grand to match the V-DAC in terms of musicality? Sad that, but the Benchmark did perform brilliantly. In fact, upon spinning any CD, it takes but a few seconds for you to realise that it is money well spent.

MEASURED PERFORMANCE

The DAC1 has a wide, flat frequency response with CD, our analysis shows, and this is one of its respective properties that gives a fairly obvious treble and the sheen common to CD, so the DAC1 will add no warmth.

Distortion levels were very low throughout the unit's dynamic range, a figure of 0.18% at -60dB being as good as it gets with 16bit resolution from CD. As a direct result EIAJ Dynamic Range measured a respectably high 111dB, so the DAC1 should sound clean enough in use with CD. With higher resolution 24bit code distortion dropped to just 0.03% through S/PDIF, again as good as it gets, so the DAC1 is very linear and up amongst the best in this respect.

Output was normal at 2V via the balanced XLR output sockets. It is common for the-balanced output to be double that of the unbalanced, although it does not have to be when balanced output line drive amps are used. It's best to use higher voltages for lines to better resist interference and noise so this result is a surprise. Measured performance from the DAC1 is very linear and last the distance. Measuring 450x200x210mm, the Benchmark provides enough presence to be noticeable but not enough to dominate. The fascia, featuring a cut-out design that some might consider stylish, includes a nicely balanced and handy stepped volume control — the only example of such here — along with two headphone sockets and a coaxial/XLR/optical selector. The rear of the case includes a wealth of options including an IEC power slot, a pair of phono outputs, a pair of balanced outputs, a variable/calibrated selector, a coaxial input, an optical input plus another supporting XLR.

However, unlike the DAC1 USB reviewed in the February 2008 issue of Hifi World, there's no USB port. Inside, the box features UltraLock technology, designed to reduce jitter along with a large toroidal transformer and neat, surface mounted componentry to reduce the signal path between each chip.

SOUND QUALITY

Along with the V-DAC, the Benchmark made me sit up and take notice, dragging me out of my slumbers with superb bass control, explicit midrange detailing and a routinely musical demeanour. Playing the Sugababes track, despite a slight increase in perceived harshness when compared to the V-DAC that did place some emphasis on the peak limiting, the Benchmark impressed with its fine control of bass. In fact this DAC took hold of bass like a lion handles a dead zebra. The Benchmark shook it until the bass realised that the DAC would do whatever it damn well pleased!

The immense low frequency control carried over to the Can ditty. In fact, as this piece features a superior master, the bass detail was far better nuanced. It was as if each sub-particle of each tone was taken, examined and carefully considered before being released to maximise the production. The tremendous sense of realism carried over to the Carol Kidd CD, where Kidd's vocals featured a delicate sheen and femininity that added to her performance by imparting a touch of vulnerability. The midrange was best represented by the dynamic acoustic guitar which screamed 'Steel!' and the treble tinged cymbals stretched through space and time. The Benchmark was as at home with this rather precise and considered jazz piece as it was on more driving rock.

Considering its still fairly modest price in the great scheme of things (well, a Chord QBD76 costs three times as much!), this is a superb digital-to-analogue conversion tool. But isn't it interesting that to my ears at least, it took a DAC costing almost a grand to match the V-DAC in terms of musicality? Sad that, but the Benchmark did perform brilliantly. In fact, upon spinning any CD, it takes but a few seconds for you to realise that it is money well spent.
Thanks to a decent, clean soundtrack will considerably augment its overall wee Russ Andrews Fubar II off, in reverse ended... but there it all more inputs, packaging and the extra cash always seemed to buy upwards as you spend more. True, still, there wasn't a simple procession svelte yet musically engaging sound. dimensionality and a generally more for example, offering more detail, player such as the Marantz CD52SE, a decent early nineties budget CD thousand pounds! Now though, the standalone DAC is back, many with upsampling and/or USB connectivity, and we're left wondering how the little blighters ever went away...

This round up showed me that there is a lot of quality on offer, from just a couple of hundred pounds. All bar the Fubar will usefully upgrade a decent early nineties budget CD player such as the Marantz CD52SE, for example, offering more detail, dimensionality and a generally more svelte yet musically engaging sound. Still, there wasn't a simple procession upwards as you spend more. True, the extra cash always seemed to buy you superior packaging and more inputs, but there it all ended...

Kicking off, in reverse order, and the wee Russ Andrews Fubar II is a fine little niche product - designed for computers only. It will improve on most people's soundcards; merely adding this box to your PC or Mac will considerably augment its overall audio quality, making iTunes listenable, or DVD movies more enjoyable thanks to a decent, clean soundtrack coming through your main hi-fi speakers.

In fifth place came the MGL Symphony DACPre. A functional looking device, it adopted an almost beatnik love for jazz, but then seemed to want to hide behind the nearest speaker cabinet when the rock musicians turned up. I liked its small footprint and its flexibility, but the sound didn’t really do it for me.

In fourth place was the Beresford TC-7510. This DAC produces such a clear, clean sound that just about any vocal track you throw at it will benefit. Rock music will lap it up too because of its bass punch and vivid, transient performance whilst jazz will appreciate its transparent personality. It’s a lot of sound per pound, and nice in an open airy way that will unlock some of the more nasal sounding entry-level digital sourced systems it’s likely to be used with.

In joint third place, enter the Cambridge Audio DacMagic and Stello DA100 Signature. I loved the magnificence of the Cambridge Audio’s soundstage that grandly announced itself to the listener, although it wasn’t quite as fluid as it might have been thereafter. Still, it’s a great, affordable, do-it-all DAC at a very reasonable price.

The same can be said of the Stello, albeit at a higher level. This proved happiest with power and meat in its music. Its thumping bass, smooth treble and highly sophisticated sound was very 'high end' hi-fi, and in some ways has the class to hold its own in a top end system and not let the side down. It responds particularly well to a good transport, we found. For example, it will tell you the difference between the already superb Cyrus CD X:SE and an Esoteric at five times the price more readily than almost any others here. But still, for all its obvious ability, it didn’t quite float my boat musically. It never really undid its top button and relaxed like it should. Powerful and gritty as it sounded, there was always a slight detachment, a perceptible unwillingness to engage with the music's soul, however superbly it handled the more technical aspects of the music. So for this listener, the top honours went elsewhere.

In second place came Musical Fidelity, and a good deal of the Stello, more bounce than the Benchmark DAC-I S. This box screams quality from within (even if it doesn't necessarily scream it from without), taking mere seconds to the post by a DAC that's nigh on £1,000 is remarkable. Don't be fooled by the case that looks like it's been made in a shed by someone with a Woodbine hanging out of their mouth - there are serious gubbins within. The sound is remarkably clear and the price low, and so very musical with it. There were obvious weak points, such as the lack of a "if you want something considerably better than the Benchmark, you'll have to save up rather a lot more cash..."

In joint third place, enter the Cambridge Audio DacMagic and Stello DA100 Signature. I loved the magnificence of the Cambridge Audio’s soundstage that grandly announced itself to the listener, although it wasn’t quite as fluid as it might have been thereafter. Still, it’s a great, affordable, do-it-all DAC at a very reasonable price.

The same can be said of the Stello, albeit at a higher level. This proved happiest with power and meat in its music. Its thumping bass, smooth treble and highly sophisticated sound was very 'high end' hi-fi, and in some ways has the class to hold its own in a top end system and not let the side down. It responds particularly well to a good transport, we found. For example, it will tell you the difference between the already superb Cyrus CD X:SE and an Esoteric at five times the price more readily than almost any others here. But still, for all its obvious ability, it didn’t quite float my boat musically. It never really undid its top button and relaxed like it should. Powerful and gritty as it sounded, there was always a slight detachment, a perceptible unwillingness to engage with the music's soul, however superbly it handled the more technical aspects of the music. So for this listener, the top honours went elsewhere.

In second place came Musical Fidelity, and a good deal of the Stello, more bounce than the Benchmark DAC-I S. This box screams quality from within (even if it doesn't necessarily scream it from without), taking mere seconds to the post by a DAC that's nigh on £1,000 is remarkable. Don't be fooled by the case that looks like it's been made in a shed by someone with a Woodbine hanging out of their mouth - there are serious gubbins within. The sound is remarkably clear and the price low, and so very musical with it. There were obvious weak points, such as the lack of a "if you want something considerably better than the Benchmark, you'll have to save up rather a lot more cash..."

And finally, the winner for me was the Benchmark DAC-I S. This box screams quality from within (even if it doesn't necessarily scream it from without), taking mere seconds to the post by a DAC that's nigh on £1,000 is remarkable. Don't be fooled by the case that looks like it's been made in a shed by someone with a Woodbine hanging out of their mouth - there are serious gubbins within. The sound is remarkably clear and the price low, and so very musical with it. There were obvious weak points, such as the lack of a "if you want something considerably better than the Benchmark, you'll have to save up rather a lot more cash..."

Best value: Musical Fidelity V-DAC

Fidelity's V-DAC, and oh what a performance! The fact that this DAC is second in the list at just £170 is pretty amazing in itself. The fact that it was only comprehensively pipped to the post by a DAC that's nigh on £1,000 is remarkable. Don't be fooled by the case that looks like it's been made in a shed by someone with a Woodbine hanging out of their mouth - there are serious gubbins within. The sound is remarkably clear and the price low, and so very musical with it. There were obvious weak points, such as the lack of a "if you want something considerably better than the Benchmark, you'll have to save up rather a lot more cash..."
The best sub-£300 mains conditioning product on the market

"Excellent value for money... A great real-world product that's useful and inexpensively upgrades your system"
Hi-Fi World

"We would not hesitate to suggest the Sirius as an effective upgrade for any system"
Hi-Fi Choice

IsoTek Sirius featured with Supreme power cable

IsoTek is committed to the creation of truly cutting edge designs through the development of unique proprietary technologies. Every product is designed and developed in the England and hand assembled in their factory in Hampshire.

Only the finest quality components are used, and many of these are uniquely developed and built to 'Ministry Of Defence' specifications.

IsoTek has consistently established a class leading reputation, a fact that has been proved by numerous reviews throughout the world and over 25 industry awards.

For your free brochure, or to locate your nearest dealer please call Sound Fowndations on 01276 501 392.
soundbites

CLEARER AUDIO COPPER LINE ALPHA POWER HUB £65+

Designed to be "a first class entry-level power supply solution for both hi-fi and home cinema systems", the Copper-line Alpha Power-HUB is manufactured from high quality extruded aluminum, and comes directly hard-wired with Copper-line Alpha Power Cable. The large socket contacts are made from copper alloy, providing low impedance. High purity large gauge 2.5mm² conductors are used internally, capable of carrying currents of up to 26A (6000W). A new active filtration mains noise system called Hyperion is fitted, using two high performance capacitors to filter both common-mode and differential-mode noise, and it's said to allow over 17A (4000W) of continuous current delivery. Status LEDs show that the HUB is powered and the Hyperion system is active. A new feature called Earth-View constantly monitors the ground integrity; should the integrity of the ground become compromised then the status indicator will go out. There's also the company's Gatekeeper Surge Protection which only activates when a surge or transient occurs. All three channels (live-neutral, live-earth and neutral-earth) are protected with surge currents of up to 10,000A being clamped in less than 25 nanoseconds, the company claims. Prices start at £65 for a 4-way, including 0.5 inlet cable, and there's a sixty day money-back guarantee.

Sound quality is excellent for such a budget product, I found this compared very well with any sub-£200 power block I've come across. It's very clean sounding, presenting a satisfyingly 'hash-free' sound in my own room. Treble proved nicely sweet, midband expansive and open and bass decently tight and propulsive, even if it wasn't quite the most impactful I've heard. Still, an excellent all round product at the price. DP

[Contact: +44 (0) 1702 543981, www.cleareraudio.com]

MY AUDIO DESIGN DIAMOND SIGNATURE £449/0.5M

This unusually named company is run by Timothy Yung, a Hong Kong Chinese who seems far more proud to base his company in the UK than most of our homegrown manufacturers! Tim takes an obsessive interest in materials technology and manufacturing processes, almost to the extent that he regards the commercial retail side of his business as an annoying distraction, which in my experience runs counter to the approach of many other cable manufacturers! The Diamond Signature is hand crafted with four "99.9997% ultra pure Diamond Die Silver" strands, said to be the highest purity available to the commercial world. It is apparently extremely labour-intensive to make, using a "Quad Cross Weave" to combat RFI. Extruding the silver conductors from a diamond die is claimed to eliminate corrosion, oxidation and contamination from the manufacturing process, ensuring the highest purity of the Silver. "The best medical-grade ultra thin PTFE dielectric" is used, as is DeoxIT on the connectors of this, the company's flagship model.

This is certainly a distinctive sounding interconnect, possessing one of the most open and accurate top ends I've heard at almost any price. Duran Duran's 'Lonely in Your Nightmare' is a fussy pop production, full of early eighties studio trickery, yet the MAD cable cut through it like a hot knife through butter, making my current mid-price reference cable, the (admittedly £150 cheaper) Missing Link Link Cryo Reference interconnect actually sound quite diffuse. Given the great quality of the latter, I wasn't prepared for the extra treble clarity the Diamond Signature was bringing - I could even hear the tape hiss running all the way through the song. It's an amazingly fast and transparent sounding cable, one which seems to have little or no overhang; instruments start and stop with tremendous alacrity.The midband is superb too, although here the MAD was less obviously superior and better described as 'different'. Whilst it made the Missing Link cable still seem quite opaque by comparison, the Link Cryo seemed a touch more dynamically explicit and rhythmically animated sounding. In no way could the MAD cable be called slow, but it seemed more interested in rendering the recorded acoustic to the highest possible resolution, whereas the ML focused more on getting into the groove. Bass was brilliantly taut and supple, but slightly less weighty than the Missing Link. Overall, this is an exceptional cable design, but you should be aware it's all about mouthwatering insight and slightly less concerned with guaranteeing the listener a cheery time. It needs superb ancillaries and top notch recordings to work with; given these it will take your breath away.

DP

[Contact: +44 (0)207 839 8880, www.madeningland.com]
Audio Research Corporation's new VSi60 integrated valve amplifier is highly reminiscent of the classic VSi55 it replaces. That's no bad thing, opines David Price...

It was back in 2003 that I reviewed Audio Research's VSi55 integrated 'tube' amplifier, concluding that it was a superb product that would appeal to a completely new sort of valve amplifier enthusiast. My reasoning went that the VSi55 was about as close to the classic Naim solid-state sound as you could get, but done with valves. As such, you kept many of the beguiling benefits of the latter, whilst offering up the energetic, seat-of-the-pants performance of the former.

As American and British tanks rolled dramatically into Iraq in the early summer of '03, I didn't so much as reach for my television 'on' button, such was my interest in this amplifier. I ended up running the VSi55 for several months, taking great care to make sure their UK importer Absolute Sounds contacted me to ask for it back, rather than me foreshortening its tenure in my listening room by calling them to let them know I'd finished with it.

After a good time spent with Perigee Acoustics FK-1 F, it found itself driving Quad ESL57s modified by One Thing Audio, and this combination sang like a bird. I remember the Audio Research taking the Quads up to very high levels (yes really), with oodles of bass, space and depth, allied to an utterly transfixing musicality. True, it didn't quite have the subtlety of the best parallel single musicality. True, it didn't quite have the subtlety of the best parallel single tube amps, running full Class A rather than the VSi55's mix of A and B, but gosh it was fun. Nigh on unforgettable, in fact...

So now, exactly sixty years later, its replacement (this, the VSi60) is back in my listening room; bashing the Beryllium of my Yamaha NS1000Ms, assaulting the aluminium of the Vivid B1s and poking the plastic panels of my Quad 99Ts. As I play, 'I'm Mandy, Fly Me', from an old 10cc LP, I'm beginning to remember why I made all the fuss. I love valve amplifiers, but I've had mixed experiences with them in my room driving my speakers. But the ballys nature of the Audio Research is such that it's not scared of anything I've got here to try them with. And moreover, it's just as 'up for it' as I remember its predecessor was.

This 10cc track can sound a little laconic via many amplifiers; even ones as good as my reference Sugden IA4 (about the same price as the AR) can make a meal of it. Not the VSi60 though, whose rendition is as intense an experience as listening to 'Anarchy In The UK' through a PA stack. It has an eerie way of elevating the listening experience, making the listener 'feel' it almost as they would if they'd had one more Jack Daniels than was good for them. But then you look down at the bottle in your hand and realise it's only Evian you're swigging!

The company claims 50W RMS per side for this amplifier, a fraction more than its predecessor if I remember rightly, and that's a lot for a valve amplifier. Physically it's almost practically indistinguishable from the model it replaced, being quite a large device at 356x203x406mm and weighing in at 15.8kg. The centrally mounted milled anodised aluminium top plate is available in black or silver finishes, with a matching front plate. The review sample was in 'retro' silver, but personally I prefer the more purposeful black. The powder coated steel casework is to a decent standard, but not exactly lavish.

The gently recessed front panel features the same long LED volume display as its predecessor, which also shows source selected and whether muting is engaged or not. To the right is the bank of control buttons, including power, mute, source (which toggles through the five inputs, and volume up and down. All these controls are duplicated on the supplied remote. I do like the fact that this is labelled in English (i.e. 'Up', 'Down') like the warning light cluster on Triumph 2000 dashboards, rather than in universal international gobbledegook symbols. Round the back, there are five pairs of phono inputs labelled CD, Tuner, Video, SE1 and SE2, plus a full-range mono subwoofer output. Voltmeter test points for setting bias, reasonably sized loudspeaker terminals with both four and eight ohm taps and an IEC mains socket.

The preamp section of the VSi60 is passive, but with microprocessor switched relays. On switch on, there's a thirty second warm up phase when the speakers are automatically muted. Audio Research say short paths are used, and there's a new J-FET input stage for low noise, with 6H30 driver tubes. The Svetlana 6550C output tube is used, as per other Audio Research valve amps, here running 7dB of negative feedback. These are mounted on very sturdy valve bases (considerably more rugged than some, I might add) and are said to be soldered to heavy plated-through circuit boards, with "the finest audiophile-grade parts" being used, along with proprietary Litz internal wiring. The amplifier is completely hand soldered and assembled, and one look under the hood testifies to this; the wiring isn't messy as such, but let's say it's laid out with the accent on ruggedness rather than aesthetic beauty!

**SOUND QUALITY**

Given that I wasn't expecting the last word in sophistication from this new Audio Research, I momentarily put aside my prized pressing of Debussy's Preludes. The 'Submerged Cathedral' would have to wait its turn in the queue, until I'd exhausted my supply of nineteen seventies classic rock LPs for which I knew this amplifier was built. Sure enough, Snuff 'n the Tears' 'Drivers Seat', a slice of pre-punk 1977 power pop went on the Sony transcription turntable first, and the
VS60 duly delivered the goods I'd been waiting for.

Yes, this is a spirited amplifier, so much so that I almost felt I should be testing it for psychopharmacological drugs. What it does to music is more than just make it exciting; you could say it has psychoactive properties. From the first bar, the ARC puts its cards plainly on the table. Bass is going to be big, like it or not, and fast too, and tuneful to an extent that it's almost distracting if you're the sort who likes valves to supply beautiful background music. If you were comparing valve amplifiers to musicians, most would be Barbara Streisand, whereas this is more like Lemmy. Even the Vivid BIs, which behaved meticulously with the Sugden, sounding impartial in the finest monitor tradition, seemed to be letting their hair down a bit all of a sudden now. I just couldn't get this infectiously catchy Sniff 'n' the Tears classic out of my head.

If the bass is vast and elastic, like an enormous bouncy castle, the midband fairly closely follows suit. It's clean alright, even if there is the slightest sensation of a tube-like sepia tint here, and it spans a wide physical space. I wouldn't say the '60 is peerless in the amount of low level detail it can throw out, but it does the high level stuff so well, you really don't care. Like the Vivid speakers, it loves to throw sunlight on dynamic accents, subtle or otherwise, and the result is a riot of toe-tapping on this or any other track. Treble is not the ARC's strong suit: nice as it is, there's always a hint of splash to hi-hats and a slightly curtailed feeling to atmospheric music. The cymbal work on this vinyl pressing sounded ever so slightly 'shut in', whereas the Sugden was a tad more delicate and atmospheric.

Next on the deck just had to be some more classic rock. ZZ Top's 'Gimme All Your Loving' is a touch on the AOR side of the genre granted, but the VS60 managed to make lead singer Billy Gibbons' vocals sound more like Slayer than the Doobie Brothers. Yes, just as you'd expect, that kick drum got the ball rolling with aplomb, signalling a declaration of intent from this amplifier that, as the great Spinal Tap would say, 'tonight I'm gonna rock you'. Bass on this song isn't quite as powerful, instead the focus falling to the superb guitar work (lead and rhythm), and the Audio Research loved this. Whereas the Sugden was terribly British and matter of fact about this, the Yank amp was cooking on gas. I found it so much more rhythmically engaging; whereas I'd listened with interest to the recording details via the Sugden, I just got lost in the music via the Audio Research.

The same thing happened with Bob Marley's 'Jamming'. The '60 was pure pleasure from beginning to end, imparting that supernatural rhythmic swing that this track has embedded deep within. But via the
Could we produce a Digital-to-Analogue converter better than the award-winning DAC64? Yes. Taking performance to a totally different level with advanced features unavailable until now, the Chord QBD76 is in a class of its own.

Designed using latest generation FPGAs with 1.25 million gates, this 5th generation pulse array DAC is truly state of the art. Its new pulse array, 8th order noise shaping and 2608 times over sampling, plus new digital phase lock loop and highly accurate 115 MHz clock, mean that data-related jitter is removed - giving just 3 pico seconds of random clock jitter. Ergonomically, the microcontroller and display gives a clear indication of status, configuration and even frequency. Additionally, the new USB input enables connection to a personal computer so that music can be streamed directly. Uniquely, we have even included a high quality Bluetooth input allowing direct audio streaming from your mobile phone, PDA or laptop.
Audio Research Corporation is one of the oldest continually operating manufacturers in American audio. The company was founded in 1970 in Minneapolis, and has grown steadily over the last quarter-century. It occupies a large production plant and administrative headquarters in Plymouth, Minnesota. A research-only facility has also been established in Palm Desert, California. Its founder and president William Z. Johnson began designing custom audio electronics in the early 1950s, and also operated a specialist audio shop until the mid-1960s. He was a big name behind the renaissance of ‘tube’ audio in the US. The company is particularly famous for its after sales service; Audio Research technicians can and will repair, refurbish and restore any product ever manufactured during the company’s thirty year history.

IA4, it was suddenly as if a group of highly proficient Japanese classical musicians had suddenly taken over the instruments, sounding meticulously perfect but somehow not quite as good as the real thing. Bass was a joy; via vinyl this song has copious quantities of low frequencies (good for moving stale air around the room, the morning after the night before, I find), and the Audio Research was like a dog with a bone - eager to show me what it had just found. Once again, it was deliciously tuneful, and even at high levels through my tube terrorising NS 1000Ms showed no sign of strain. Again, midband was wonderfully expansive and infectiously rhythmical, while I switched back to jazz in the shape of Herbie Hancock’s ‘Maiden Voyage’ and suddenly all was forgiven, with the VSi60 telling me in no uncertain terms that: “it doesn’t mean a thing if it ain’t got that swing”...

CONCLUSION

Personally I love this amplifier, but will concede that it’s not all things to all men. Probably one of the most ‘solid-state’ sounding tube integrateds around, it allows transistor amp owners to go thermionic without leaving their comfort zone. It also less people like me, who know exactly what music they listen to and ancillaries they use, to parachute in a valve amplifier when normally only a solid-state is powerful enough. But what it won’t do is please the fully paid up valve brigade, who love to be cossedet, wrapped in silk and serenaded by their glowing glass bottles. It’s not a valve aficionado’s valve amp, but rather a music lover’s - or more precisely, a rock, pop or jazz music lover’s. Not having the Audio Research VSi55 to hand any more, I can’t comment authoritatively on the relative changes, but I’d wager that the new VSi60 is a fraction more powerful and just a touch more open and svete sounding - all of which are steps in the right direction. This is a great product then, a truly charismatic, distinctive amplifier aimed at audiophiles who know precisely what they want.

REFERENCE SYSTEM

Sony TT-S8000/OL Silver/Ortofon Winfield t/t A.N.T. Audio Kora 3T Ltd. phono stage Sugden IM4 integrated amplifier Yamaha NS1000M loudspeakers Vivid B1 loudspeakers Quad 889 loudspeakers

VERDICT

Bread shouldered, barrel-chested bruiser of a valve amplifier with a compellingly musical character.

MEASURED PERFORMANCE

The VSi60 uses single push-pull output pairs of 6550s working with fixed bias to deliver 40 Watts per channel (1% THD) into either 8 Ohms or 4 Ohms. Power levels from each were almost identical so secondary coupling efficiency is good. ‘Fixed bias’ is a misnomer by the way: it means the bias has to be adjusted regularly, unlike Auto bias which needs no adjustment but gives less power.

Distortion levels were very low, hovering around Harold Leak’s ideal 0.1% figure in the midband, except close to full output (0.6%) and comprising innocuous sounding second harmonic. The output transformers, as small as they look, worked very well at low frequencies, with just 0.2% distortion at 1 Watt. 40Hz, rising to 1% near full output. At 10 Watts, 0.35% of second harmonic distortion at 40Hz suggests clean sounding bass compared to many valve amps. However, damping factor is low at 1.7, suggesting little feedback (a feedback valve amp usually manages 3-4) and soft bass with under-damped (bass heavy) loudspeakers.

Input sensitivity was low at 400mV and bandwidth also restricted to just 23kHz (-1dB) again suggesting low feedback. Lowering feedback produces a more dynamically expansive sound. The VSi60 measures well all round. It should give a tidy yet impressive sound, much like its predecessor. NK

Power
40 Watts
CD/tuner/aux.
Frequency response
3Hz-23kHz
Separation
98dB
Noise
-96dB
Distortion
0.2%
Sensitivity
400mV
Damping factor
1.7

www.hi-fiworld.co.uk SEPTEMBER 2009 HI-FI WORLD 29
A search of all-inclusive, unique perfection. Every minute detail has been meticulously thought out using the finest materials, selected with greatest care to blend beauty and technology. A fundamental and passionate process devised by a team of men and women who strive to achieve their sole ambition, that of providing the future owner of such rare equipment the enjoyment of a perfect instant, so fugitive yet so everlasting.
Do you want to perfectly hear the rosin in Nigel Kennedy's bow strings, or have John Bonham's epic drumming pin you against the back wall of the lounge? It isn't easy to find a loudspeaker than can manage both well. Stringed instruments, especially violins, can sound stunningly natural through electrostatic loudspeakers like Quad Musikwiedergabe ESL-57's, but forget hearing and feeling one of Bonham's cataclysmic drum sequences. For that you need a big horn. A Tannoy Westminster Royal SE will do nicely, or perhaps the little known JBL Everest DD66000. But then Nigel's violin will not sound quite the same...

Neither loudspeaker is an easy proposition for the average home, nor the average pocket. But designers strive to approach their famed and loved abilities in smaller, simpler packages that will sit atop a loudspeaker stand — and that is what I am looking at here. We chose a rare-in-the UK JBL LS40 to see how Americans condense down the horn sound into something that will fit into the lounge — even a U.K. lounge. Is it a mini-Westminster? No, it's a mini-Everest DD66000, which is a very different animal to the Westminster! A Westminster comes with a bass and midrange horn; the DD66000 has a midrange horn only, using conventional bass units; two 15in monsters no less! The LS40 uses a similar drive unit arrangement.

Adopting an altogether less visceral approach to music reproduction is a new design from Roksan, the TR-5, fitted with a ribbon tweeter. It isn't an electrostatic but ribbons can give superior results to domes and reproduce strings really well. Electrostatics are very specialised, only a handful of manufacturers making them worldwide. They are expensive and need mains power. Across the treble regions at least, where metal domes and horn loaded tweeters can give miserable results, a ribbon tweeter can give an electrostatic a run for its money. As always, this is the theory but the practice can be different.

Nowadays the Chinese imaginatively produce anything that has ever been devised by mankind's fertile inventiveness, if not always so well, and this includes ribbon tweeters. This is why they are suddenly becoming common on commercial loudspeakers. Cheap they are; cheerful many are not. Happily, our B&K measuring microphone and Clio measurement system can easily sort the cheap from the cheerless, as you'll see in this review. Happily, Roksan have long experience and keep a firm grip on their sound so the chances of the TR-5 getting a 'cheerless' ribbon were slim. But is the end result a match for an ESL-57?

Or should you just forget wacky designs that seemingly attempt the impossible, and miss the point in the process, and instead buy a good, modern conventional loudspeaker like B&W's new CM5? Perhaps a Quad will forever be a Quad and a Tannoy a Tannoy, and neither can ever be distilled into a stand-top package. This raises issues of balance and maturity. B&W loudspeakers do not conspicuously excel in any one area, they just manage to do everything respectably in a well-balanced way. Okay there's always too much treble (a B&W trademark) but otherwise, weaknesses are hard to find, leaving a confused buying public happy to make them one of the UK's most popular brands. The small standmounting CM5 in this report is brand new and fought its corner rather well on not being wacky, I thought...

Three very different standmounting loudspeakers face off up against one another, as Noel Keywood referees. Read on to find out which delivers the knockout blow!
B&W CM5 £790

Whilst the Roksan and JBL loudspeakers try to escape today's two-way design idiom, B&W happily stay with a standard and consistent engineering approach to their loudspeakers. They use distinctive yellow woven Kevlar cones for their bass/midrange units, almost always accompanied by an aluminium dome tweeter. The bass unit is loaded by a port because it gives the lowest bass from a small cabinet. Another consistent feature of B&W's is their use of a simple first order crossover to the tweeter, which they claim gives a purer upper midband.

SOUND QUALITY

B&W have set the tweeter to dominate and it is very obvious most of the time. There's a thin hiss to upper treble that comes from the measurable lift in high frequency output. As the Eagles 'Somebody' gets into its stride it's plain to hear the sibilant content from Glenn Frey's vocals is emphasised. Cymbals sounded thin too and the tweeter sounded overly prominent and none too couth.

In all other ways, the CMS was simply more adept in what it did than either the JBL or the Roksan, and tweeter apart, possessed cleaner, tighter and punchier bass than the bloated JBL or the reticent Roksan. For a relatively small cabinet the CMS's bass had real punch. It was tight and fast, yet powerful too, which is a great blend of properties that I suspect will appeal to a wide range of listeners. There's no deep bass rumble but the speaker has bass pace, and that's rare.

Midband is conspicuously clean and clear. I don't find Kevlar quite so neutral; it has its own slight 'schhh' sound. But it is less coloured than most metal cones and you can hear this with strings in particular, where metal cones are just too 'shiny' sounding to be convincing. The CMS scored in being highly detailed and insightful as well, to a degree the others could not match.

So in spite of the B&W CMS's excessive treble it was still the best balanced loudspeaker of the group and has considerable strengths.

MEASURED PERFORMANCE

The standmount CMS has a smooth and even frequency response over the most critical music frequencies. B&W use a simple, first order high pass crossover to feed the tweeter however and this gives measured response undulations caused by phase cancelation, a feature in our response plot that can be seen as dips, but these vary with microphone (and head) position. All the same, tweeter output is +2dB up above 10kHz and this will add a bright edge to the sound, at least when full range recordings are played. Bass rolls down smoothly below 100Hz to suit near rear wall placement. The port peaks at 50Hz, quite a high frequency, and will add punchy weight to bass.

Sensitivity was good at 86dB from one nominal watt of input, so amplifiers of 40 Watts or so will give high volume. As a load the CMSs are very reactive and obviously little attention has been paid to this by B&W. Amplifiers give varying results when faced with a load like this. The bass unit had a 4.1 Ohm DCR and measured impedance with pink noise was 7 Ohms.

The loudspeaker's decay spectrum was clean enough, with no strong overhangs so colouration will be low.
Roksan's new Kandy TR-5 stand mounting loudspeaker is a complete contrast to the JBL LS40. Where the latter has been tailored to be a real room shaker with no absence of treble, the TR-5 really is a ribbon tweeter with a bass unit attached. I’ve designed this sort of arrangement myself in the past and know the difficulties – most of which the TR-5 doesn’t try very hard to avoid! First out, most physically compact ribbon tweeters don’t reach lower than 4kHz – far too high to crossover smoothly with a bass/midrange unit. Yet Roksan ignore this, as do manufacturers like Zu I have to say, and pair it with a 130mm (5in) coated paper bass unit all the same. The bass/mid driver must be small if it is to struggle up to 6kHz – an almost impossible task. But of course, a small bass/midrange unit isn’t going to give you kick-arse bass. Never mind, with a cabinet of reasonable proportions it is possible to get slightly over-damped bass that suits near-wall placement - and bingo! we have a loudspeaker. But what sort of loudspeaker do we have?

I was hardly aware that the loudspeaker actually had a treble unit, its treble was so smooth and character-free. The TR-5’s ribbon tweeter sounded almost silky smooth and all but ‘not there’. Close miked cymbals high in the mix on Steve Earle’s ‘Copperhead Road’ had just the slightest hiss to them, but still they were clean and easy on the ear, although I was using the Icon Audio MB845 power amplifiers that lack the sting of much solid-state. Roksan Kandy amplifiers will likely do nicely though.

The gap between mid and treble was pretty obvious, I have to say, and I was often aware that vocals had a softened presence. Listening to Renee Fleming singing Madame Butterfly for example, where there was little upper treble in the music to excite the tweeter, then I was listening to the bass/midrange unit working almost alone, making for a very mellow sound. However, the upside to all this was that the TR-5 could be turned right up in volume and remain easy on the ear, and that is what I found myself doing often. Even when positioned close to a rear wall bass wasn’t heavy, and for many this may be the TR-5s greatest drawback: it has a light-ish balance. All the same, bass quality was very pleasant and in smaller rooms – 14ft or less – the TR-5s may work nicely with room modes to sound just right in terms of overall balance.

In spite of their weaknesses, the TR-5s were beautifully clean in their sound, easy on the ear and very enjoyable I felt, rather more so than their metal dome tweetered competition. Yes, Nigel Kennedy sounded wonderful through them. The TR-5s are a breath of fresh air in possessing a simple, easy delivery that is soothing and enjoyable.

**VERDICT**

Super clean sound is likely.

The K2 TR-5 is likely to sound tonally balanced, have tight, punchy bass but not overblown bass, highly detailed and that suggests it will be free from colouration - more so than most. So a super clean sound is likely.

Roksan Audio Ltd

Roksan TR-5

£895

Roksan Audio Ltd

C +44 (0)20 8900 6801/2

www.roksan.co.uk

**MEASURED PERFORMANCE**

Frequency response of the K2 TR-5 is characterised by a broad dip between the bass/midrange unit and the ribbon tweeter, extending from 1.5kHz up to 4kHz; sufficiently wide to be audible, heard as a softening of the sound, with reduction of vocal intelligibility. The ribbon tweeter works from 4kHz upward it seems, much like others of its size, and inability to integrate a stainless steel/mid is a common difficulty Roksan have not overcome in the TR-5. The tweeter itself works well enough, although the 16kHz spike in its frequency response may well be heard as a ‘sting’ at times.

Output from the bass/midrange unit is smooth and even, low frequency output falling away gently below 200Hz, an over-damped response appropriate for near-wall mounting. The K2 TR-5s bass rolls down slowly, supported by healthy output from the port at 55Hz, which measured +6dB up on forward output at 80Hz. In medium sized rooms it will go low, whilst sounding tight and fast, but not bass heavy.

Sensitivity was low at 84dB so reasonable amounts of power will be needed - at least 40 Watts - for high volume. A high measured impedance of 8 Ohms contributes to this, and as a load the K2 TR-5 is peaky and reactive in the mid-band, although quite well damped in the bass where it needs to draw amplifier power.

A very strong feature of the K2 TR-5 is an unusually clean decay spectrum that suggests it will be free from colouration - more so than most. So a super clean sound is likely.

**FREQUENCY RESPONSE**

Green - driver output

Red - port output

**IMPEDANCE**

Sensitivity was low at 84dB so reasonable amounts of power will be needed - at least 40 Watts - for high volume. A high measured impedance of 8 Ohms contributes to this, and as a load the K2 TR-5 is peaky and reactive in the mid-band, although quite well damped in the bass where it needs to draw amplifier power.

A very strong feature of the K2 TR-5 is an unusually clean decay spectrum that suggests it will be free from colouration - more so than most. So a super clean sound is likely.

**REVIEW**

Roksan Audio Ltd

Roksan TR-5

£895

Roksan Audio Ltd

C +44 (0)20 8900 6801/2

www.roksan.co.uk

**FOR**

- easy sounding midband
- smooth, extended treble
- clean bass

**AGAINST**

- midband warmth
- light bass balance
- little deep bass
Inspire Hi-Fi

worth waiting for...

Taking sound to a whole new level.
www.inspirehifi.co.uk

Demonstration now available. Call us on 01246 568770.
The JBL LS40 is the most characterful design of the group, largely because JBL are a U.S. manufacturer of large loudspeakers, including many horns. JBL narrow down the parentage of this loudspeaker as being ultimately the Project Everest D56000. This is a behemoth with two 15in woofers no less, a massive midrange horn and a tweeter. With a weight of 142kgs, it is heavier than the Tannoy Westminster Royal SE I mentioned earlier! In scale, the LS40 is less ambitious, coming in at a more manageable 13.5kgs. It still has a horn loaded tweeter and horn midrange however, just like the Everest, plus a pulp cone woofer, only the sizes being different. The LS40's 5cm (2in) titanium midrange driver, horn loaded to fire forward in a controlled manner, is especially unusual and you can see its large, flared throat in the pictures.

So what's this all about? In a nutshell, dynamics. It's about giving a loudspeaker a punchy and exciting sound, which subjectively is what big horn loudspeakers do well, often at the expense of smoothness and subtlety. But many of us - perhaps most - like a loudspeaker that can seemingly put a performance into a room, rather than paint a sedate picture of it between the loudspeaker stands. How well did the LS40 manage?

The LS40 has very strong bass, as we suspected from its measured frequency response which shows output steps up and is prominent over the bass region below 200Hz. Bass lines jumped right out of the cabinet as a result and had enormous presence in the room, the prominent bass lines of Angelique Kidjo's CDs swirling through the room with pervasive power, for example. However, the port makes a big contribution so there's plenty of low bass, but quality isn't so good, bass notes sounding soft and ill defined. I had reservations at times, with Skunk Anansie's ' Hedonism' to mention just one example, where the bass was cabinet bound and sometimes of peculiar quality.

The midband, by way of contrast, sounded smooth and clean - and there was just the expanded dynamic horns are renowned for. So Skin's voice fairly leapt from the speaker, her challenging delivery deftly conveyed. I revelled in vocals through the LS40, so clear and projective were they.

Unfortunately, the tweeter has an obvious ring and could sound ragged too; often it was too forward to be acceptable I felt; much better is possible nowadays.

The LS40 tries to be a large loudspeaker but it doesn't manage it too well, mainly because detail design was poor. Tidied up, with cleaner bass and smoother treble it could excel, so the essence is there, even if the execution isn't.

JBL LS40 £999

---

**MEASURED PERFORMANCE**

**FREQUENCY RESPONSE**

Our third octave, pink noise analysis of frequency response of the JBL LS40 shows a relatively even result nicely aligned horizontally along the OdB datum line. However, the treble unit is +3dB up above 7kHz and the bass unit has an impressive subsonic output down to 20Hz. Our more detailed stepped and gated sine wave response reflects this, but multiple peaks and troughs obscure the overall trends. This is a common problem with horns; they have a very uneven response under measurement. Subjectively the brain is aware of this but it cannot detect it with certainty, so the sound is balanced and even, but the quality is different (less svelte) in its unevenness. The tweeter will sound obvious and spiky though its chamber is likely the problem.

The port is +7dB up at 80Hz, making it no less than +12dB up on forward output so it has a big presence at 40Hz, meaning the LS40 will rumble strongly at low frequencies: it has big bass. However, there's no bass peaking so it isn't resonant bass and the LS40 will likely sound well controlled, if powerful at low frequencies.

Sensitivity was average at 87dB, disappointing for a large enclosure with horn loaded drivers, especially as overall impedance measured out at 6.2 Ohms. The decay spectrum was clean except for a small amount of overhang at 150Hz that may add some thrum or thickness. Distortion levels were low. The LS40 will have a distinctive sound measurement suggests. The tonal balance is even but there is unevenness across the midband and highs are accentuated and all this will reflect in the sound. Big, deep bass will impress.

**VERDICT**

Captivating sound, but crude treble and overly heavy bass allied to boxiness limit its all round appeal.

JBL LS40

Harman Consumer UK

+44 1707 278100

www.jbl.com

**FOR**

- punchy nature
- powerful deep bass
- fine midrange dynamics

**AGAINST**

- boxy thrum
- poor quality treble
- meddlesome bass quality

**IMPEDEANCE**

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>Impedance (Ohms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>15.0</td>
</tr>
<tr>
<td>100</td>
<td>11.0</td>
</tr>
<tr>
<td>1k</td>
<td>9.0</td>
</tr>
<tr>
<td>5k</td>
<td>8.0</td>
</tr>
<tr>
<td>10k</td>
<td>7.0</td>
</tr>
<tr>
<td>20k</td>
<td>6.0</td>
</tr>
</tbody>
</table>

---

NK
The best loudspeaker is one that you can't hear. Sounds odd, doesn't it? But it should be all about the music; you don't want to have this disturbed by the distortions and reflections a traditional speaker enclosure presents.

The B1 features our own patented drivers coupled to tapered tube absorbers. This technology eradicates the rear firing information from our drive units leaving just the pure sound that makes the speaker disappear.

For more information:

01903 530005
uk@vividspeakers.com
www.vividaudio.com

Beauty isn't just about looks.
LS40 was impressive and lived up to its promise of a horn sound from a small box. Pity then that the tweeter was so poor, being something of a blemish on a promising package. Ignoring this, as some listeners may, I would say the LS40 is successful in capturing the essence of a horn loudspeaker like the massive DD66000, if a little compromised by JBL’s distinctive voicing that’s short on subtlety. You never know, matching it to a smooth vinyl front end with a nice full sounding valve amplifier might really make this a usable loudspeaker.

The Roksan K2 TR-5 is a great speaker to listen to. Strictly speaking it isn’t accurate and Audiomile’s Kensa I reviewed in our June 09 issue managed to combine ribbon tweeter and dynamic bass better, if at greater cost. But immediately when I heard the TR-5 I liked it and continued to after extended listening. The upper midrange dip lessens detail and insight, but it also makes for a very smooth, easy sound that almost magically lacks the hard midband glare of CD. It was a “turn it up” loudspeaker. If I did this with the JBL I was overwhelmed by its bass and strung by its treble, and if I did this with the B&W the tweeter became difficult to tolerate and the upper midband proved unforgiving. So the TR-5 is a real smoothie, but its ribbon tweeter ensures there’s still plenty of clean treble. Okay, I was aware that it isn’t accurate and Audiomile’s KSensa I reviewed in our June 09 issue managed to combine ribbon tweeter and dynamic bass better, if at greater cost. But immediately when I heard the TR-5 I liked it and continued to after extended listening. The upper midrange dip lessens detail and insight, but it also makes for a very smooth, easy sound that almost magically lacks the hard midband glare of CD. It was a “turn it up” loudspeaker. If I did this with the JBL I was overwhelmed by its bass and strung by its treble, and if I did this with the B&W the tweeter became difficult to tolerate and the upper midband proved unforgiving. So the TR-5 is a real smoothie, but its ribbon tweeter ensures there’s still plenty of clean treble. Okay, I was aware that vocals had a soft edged demeanour and had to ignore the effect. The TR-5 really does a great job in spite of this – and its light bass. It offers a better take on music than most dome-tweetered rivals, especially its competitors here. I’m very sensitive to treble quality, perhaps because I have lived with electrostats, and for me Roksan’s ribbon would likely be a clinching advantage in a buying decision. All the same, it isn’t quite an ESL-57 clone I have to say, even if it is as easy on the ear.

As always, final choice is personal, especially when each of these loudspeakers has a sound made distinctive by their ‘voicing’ for the market place. A pity really, because they all have merit and with a little bit of honing each could be made more neutral ambassadors of their particular idioms. JBL certainly have something to offer, but the LS40 needs refinement. B&W know what they want and just do it; there’s no doubt that much of the CMS impresses. In this group Roksan’s TR-5 was the easiest and most immediately relaxing listen, showing that ribbon tweeters have a lot to offer. It may not have the delightful purity of the Quad Musikwiedergabe ESL-57 I spent a little time in front of at the Munich High End Show a few months ago, but it has its own easy manner that beguiles. A points win to Roksan, then, even if there was no straight knockout.

"the Roksan offers a better take on music than most dome-tweetered rivals, especially its competitors here..."
Lacking the superfluous video functions of its rivals, Rotel's new RSX-1550 is designed as an audiophile AV receiver rather than a 'jack of all trades and master of none'. Noel Keywood decides whether it's for him...

If you got rid of all the rubbish that festoons AV receivers wouldn't they be cheaper and easier to operate?”, I once asked John Dawson, founder of Arcam. “No”, was his reply. I was wrong again, and Rotel's RSX-1550 receiver appears to back him up. From a dedicated Japanese audio manufacturer, it discards a lot of video paraphernalia and majors on audio, so appears to be a great potential choice for those that want good sound quality. But there are no savings to be had, as it costs a surprisingly high £1,400. Can the RSX-1550 justify its price?

The Rotel doesn't in fact drop all the bits I was alluding to as "rubbish", just many of them, which I will detail later. From its basic specification it also loses arguably more contentious items, like two amplifying channels; this is a 5.1 receiver, not 7.1. Like most, including the all-conquering Onkys which are my benchmark in the field. Since the Back channels are synthesised from the Rears in a 7.1 set up and this puts four loudspeakers at rear for three up front, it's a defendable decision to make, but it does eliminate the option of bi-amping the front loudspeakers for better quality.

What you get then is a 5.1 channel receiver that delivers well over 100 Watts per channel, our measurements show. It can be made up to 7.1 by the addition of a two channel (stereo) power amplifier. It has four rear panel HDMI inputs with full processing from them (1.3a standard) and one HDMI output to the TV. Connect up a Blu-ray or perhaps DVD player and you can play CD, video DVD and Blu-ray discs. If you buy the newly released (in the USA) Oppo BDP-83 player then you can also add SACD and DVD-Audio discs to the roster of audio formats.

The RSX-1550 does not handle native DSD code from SACD, transcoding it to PCM at 88.1kHz rate for its 24/192 spec. onboard DACs. So SACDs will play through the Rotel, but not to full quality, our measurements confirmed.

From Blu-ray the RSX-1550 handles Dolby TrueHD and DTS HD Master Audio losslessly compressed formats, as well as PCM up to 24/192, so all high definition Blu-ray audio formats are catered for.

Rotel fit a very respectable VHF/FM tuner, an AM tuner but not DAB, or internet radio through an ethernet cable from an internet router. The ethernet socket fitted is for a computer connection requiring proprietary software; the Rotel cannot read computer music files via this link, unlike the similarly priced Onkyo TX-NR906 I reviewed in our March 09 issue.

Finally, the Rotel has no phono stage. Obviously, it will accept an external stage, but this brings up another issue: Direct mode as it is usually called. Rotel offer a Bypass mode, so an external phono stage isn't routed through the input ADC, which degrades quality Where Pure Direct on Marantz and Onkyo receivers bypasses the ADC, all DSP settings as a result, and displays, the Rotel has no such ability - a pity. I usually hit the Pure Direct button to ensure I bypass all the toot embedded in most AV receivers and there is a definite improvement in focus and resolution. So Bypass is useful for an external phono stage, but it doesn't perform the usual Pure Direct function, and the Rotel needs this facility I feel. Not for no reason do Marantz and Onkyo fit this as a large 'panic button' for distressed audiophiles!

I was happy to see no mention, nor any sign of, THX Cinema modes or Audyssey loudspeaker tuning. Measurement and Listening show the Audyssey loudspeaker equalisation system manages nothing either useful or intelligent, and automatic level adjustment sets rear loudspeakers too high, yet it gets much else nicely sorted. With the Rotel it is all done manually. For more details see the handbook at www.rotel.com/content/manuals/rsx1550.pdf. Distances (time delay) and loudness can be adjusted. Although there is no graphic equaliser, there are spectrum extreme trims to tweak upper treble and lower bass, known as Contour Setup.

There are 7.1 preamps outputs for external power amplifiers, and a 7.1 multichannel analogue input for connection of older SACD and DVD-A players lacking HDMI.

Rotel fit lines of Composite and S-Video inputs on the rear, which I find a little baffling as these are now archaic - one set would do. There is one set of high quality Component analogue inputs and one output for analogue monitor connection. Analogue video can be sent out as digital over HDMI, but digital video cannot sent out as analogue through the Component outputs, so, say, a video from a Blu-ray player cannot be sent to an analogue monitor or projector. Upscaling is provided, so DVD can be upscaled to HD spec., but as most DVD and Blu-ray players do this internally, as do most TVs, again it's a feature I like to see little need for.

Unfortunately, the receiver's front panel carries no inputs at all, nothing for an iPod, nor anything for a video camera. The dot matrix display panel isn't very large and its displays are spindly and inelegant.
The On Screen Display (OSD) for the TV is also prosaic, in operational methodology, sparse symbolism and crude graphics. It's none too easy to comprehend and the handbook isn't much help either. I suspected the origins of all this lie in a Chinese factory and sure enough the Rotel is Made in China. This makes for a poor user experience and I'm surprised at how companies like Rotel and Denon seem uncomprehending about such things in a market so dominated by Onkyo and Marantz who do it all so much better.

At least Rotel fit decent loudspeaker outlets at the rear, ones that don't wobble and accept 4mm plugs, as well as spades and bare wire.

**SOUND QUALITY**

Spinning CD in a Samsung BD-P1600 Blu-ray player acting as a transport, digitally connected via SPDIF using an optical TOSLINK cable (because Samsung reclock their outputs for incredibly low jitter) it was fairly obvious that the RSX-1550 gave a full-fat version of the Rotel sound I know and respect. The Stranglers singing 'Always The Sun', from the 'Dreamtime' album, had real bite to leading edges from the drums, and a firm presence from Jean Jacques Burnel's sinuous bass lines. With hard etched outlines, a sufficiently wide timbral palette able to well express differences between instruments and a captivating sense of depth that allowed the stage to fall away backwards convincingly to provide a sense of depth, I found the Rotel had its own charms and soon relaxed into using it with a wide variety of Rock and Classical albums.

It does have an etched-from-stone feeling of solidity to its sound. The Rotel is strong in providing a good, solid drive to music with real kick in the bass, the like of which is only improved upon by the similar sounding by slightly more svelte Rotan stereo amplifiers. I think classical enthusiasts may question the hardness of tone brought to strings, but there's usually a trade-off somewhere. Where the Rotel neatly sidesteps overall criticism is in its ability to impress a sense of dimensional composure on the sound stage, so where an Onkyo will sound very powerful in the bass and full bodied, it is a bit more blancmange-like in its sound stage imaging qualities. Hard and firm outlines aren't quite its strength.

So spin Compact Disc through the Rotel RSX-1550 from a decent transport and it rocks in a satisfyingly earthy way, yet it has some svelite audiophile properties too. Reconnecting via HDMI to the Samsung and spinning a 24/96 PCM recording of Chris Botti's 'Live' concert on Blu-ray again brought forth fine dynamic contrasts, a silky smooth trumpet yet one made of brass, not another metal more ferrous in nature. The Rotel was fully able to convey the usual easy, uncomplicated mix from the sound desk that you get from these 24/96 HD concerts, and the commensurately full bodied sound of the instruments within a large space that imparts a good live atmosphere, bringing the glory of a good HD recording right into the home. In this area Rotel's receiver excels, at least if you like its type of presentation, and I think most people would. Only Marantz manage to inject a little more sparkle, avoiding the structural hardness of the Rotel's sound, if not improving on its depth of staging and sense of dimensionality.

Spinning the Trondheim Soloists' 24/192 Blu-ray music disc of 'Divertimenti' again brought forth a richly textured and full bodied delivery from their strings, with what was almost a growl from bowed downstrokes across the lower strings; the Rotel's strong dynamic resolution helped give instruments force. As usual, straight PCM gave the best results, very tidy and well composed, whilst Dolby TrueHD was a little soft on transients, which surprised me a little, and DTS HD Master Audio was vivid with an impressively large sound stage. Dolby True HD usually comes out well, close to DTS and uncompressed PCM through most receivers when I make this comparison, so quite why the difference here I do not know.

Another difference, but an expected one, was the relatively mediocre sound from the SACD Divertimenti disc (played on an Oppo DV-980H). This usually provides a smoother, more svelite delivery than PCM, at least when played through quality DSD decoders like those to be found on Onkyo's excellent PR-SC886 preamplifier!
Tucana II

Borrowing heavily from developments pioneered in the staggering Leema Reference Series Altair IV amplifier, the Tucana II is an even more accomplished performer than its multi-award winning predecessor. Improved dynamic range, resolution of fine detail, and remarkable clarity help the Tucana II present music with life-like verve into even the most fussy of today’s audiophile speakers. This highly refined amplifier can deliver over fifty amps to each channel with a vice-like grip and precise control of the loudspeakers.

New features on the Tucana II include an MP3 input, balanced input, headphone output, direct input selection, adjustable input gain, and a balance control.

The Tucana II helps even the most complex music make complete sense.

Please visit www.leema-acoustics.com to find your nearest dealer

Leema Acoustics: Award winning hi-fi
reviewed in the July 2009 issue. Not through the Rotel though, which came across as unfocused and a little coarse. I found this held with other SACDs played on the Oppo, so whilst it copes with the format, it does not really do it justice. All those with a large SACD collection may well want to look elsewhere.

VHF/FM had a nice even balance as measurement suggested it would, with neither the slight softness that is common, and no treble spikiness either, both effects arising from the ripples of a misterminated mpx filter. Rotel engineer this section well, so rippling of a multi-terminal mpx filter.

Distortion was very low right across the audio band, and especially at high frequencies as measurement suggested it would, reminding me that Rotel are a hi-fi company and know how to design a good amplifier. Input sensitivity was on the low side at 370mV via CD in, so no treble spikiness with neither the slight softness that was on the low side at 370mV via CD in, so the Rotel can resolve as much as 88kHz. Since distortion at -60dB measured 0.24% against a possible 0.03% or so for DSD decoded well, the Rotel only handles SACD for convenience, not to fully realise its performance.

The VHF/FM tuner is a good one, with wide flat-ish response to 17kHz before an mpx filter cuts in to remove pilot tone at 19kHz. Since measuring a respectable 33kHz. Since fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

CONCLUSION

Listening to music through the Rotel RSX-1550 from CD, DVD-Audio or Blu-ray, I appreciated its rock-solid delivery, soundstage depth and generally subtle performance. The VHF/FM tuner was impressive too, so the receiver manages very well at a fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

VERDICT

Fine sound quality, but very short on features at a high price.

FOR

- most digital formats
- good VHF/FM tuner
- punchy sound

AGAINST

- no DSD decode
- no display mute
- no internet radio

The chunky Rotel produced 112 Watts into 8 Ohms and 170 Watts into 4 Ohms, most loudspeakers nowadays being nearer 4 Ohms than 8, so it will deliver plenty of punch in practice. Distortion was very low right across the audio band, and especially at high frequencies as measurement suggested it would, reminding me that Rotel are a hi-fi company and know how to design a good amplifier. Input sensitivity was on the low side at 370mV via CD in, so no treble spikiness with neither the slight softness that was on the low side at 370mV via CD in, so the Rotel can resolve as much as 88kHz. Since distortion at -60dB measured 0.24% against a possible 0.03% or so for DSD decoded well, the Rotel only handles SACD for convenience, not to fully realise its performance.

The VHF/FM tuner is a good one, with wide flat-ish response to 17kHz before an mpx filter cuts in to remove pilot tone at 19kHz. Since measuring a respectable 33kHz. Since fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

CONCLUSION

Listening to music through the Rotel RSX-1550 from CD, DVD-Audio or Blu-ray, I appreciated its rock-solid delivery, soundstage depth and generally subtle performance. The VHF/FM tuner was impressive too, so the receiver manages very well at a fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

VERDICT

Fine sound quality, but very short on features at a high price.

FOR

- most digital formats
- good VHF/FM tuner
- punchy sound

AGAINST

- no DSD decode
- no display mute
- no internet radio

The chunky Rotel produced 112 Watts into 8 Ohms and 170 Watts into 4 Ohms, most loudspeakers nowadays being nearer 4 Ohms than 8, so it will deliver plenty of punch in practice. Distortion was very low right across the audio band, and especially at high frequencies as measurement suggested it would, reminding me that Rotel are a hi-fi company and know how to design a good amplifier. Input sensitivity was on the low side at 370mV via CD in, so no treble spikiness with neither the slight softness that was on the low side at 370mV via CD in, so the Rotel can resolve as much as 88kHz. Since distortion at -60dB measured 0.24% against a possible 0.03% or so for DSD decoded well, the Rotel only handles SACD for convenience, not to fully realise its performance.

The VHF/FM tuner is a good one, with wide flat-ish response to 17kHz before an mpx filter cuts in to remove pilot tone at 19kHz. Since measuring a respectable 33kHz. Since fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

CONCLUSION

Listening to music through the Rotel RSX-1550 from CD, DVD-Audio or Blu-ray, I appreciated its rock-solid delivery, soundstage depth and generally subtle performance. The VHF/FM tuner was impressive too, so the receiver manages very well at a fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

VERDICT

Fine sound quality, but very short on features at a high price.

FOR

- most digital formats
- good VHF/FM tuner
- punchy sound

AGAINST

- no DSD decode
- no display mute
- no internet radio

The chunky Rotel produced 112 Watts into 8 Ohms and 170 Watts into 4 Ohms, most loudspeakers nowadays being nearer 4 Ohms than 8, so it will deliver plenty of punch in practice. Distortion was very low right across the audio band, and especially at high frequencies as measurement suggested it would, reminding me that Rotel are a hi-fi company and know how to design a good amplifier. Input sensitivity was on the low side at 370mV via CD in, so no treble spikiness with neither the slight softness that was on the low side at 370mV via CD in, so the Rotel can resolve as much as 88kHz. Since distortion at -60dB measured 0.24% against a possible 0.03% or so for DSD decoded well, the Rotel only handles SACD for convenience, not to fully realise its performance.

The VHF/FM tuner is a good one, with wide flat-ish response to 17kHz before an mpx filter cuts in to remove pilot tone at 19kHz. Since measuring a respectable 33kHz. Since fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

CONCLUSION

Listening to music through the Rotel RSX-1550 from CD, DVD-Audio or Blu-ray, I appreciated its rock-solid delivery, soundstage depth and generally subtle performance. The VHF/FM tuner was impressive too, so the receiver manages very well at a fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

VERDICT

Fine sound quality, but very short on features at a high price.

FOR

- most digital formats
- good VHF/FM tuner
- punchy sound

AGAINST

- no DSD decode
- no display mute
- no internet radio

The chunky Rotel produced 112 Watts into 8 Ohms and 170 Watts into 4 Ohms, most loudspeakers nowadays being nearer 4 Ohms than 8, so it will deliver plenty of punch in practice. Distortion was very low right across the audio band, and especially at high frequencies as measurement suggested it would, reminding me that Rotel are a hi-fi company and know how to design a good amplifier. Input sensitivity was on the low side at 370mV via CD in, so no treble spikiness with neither the slight softness that was on the low side at 370mV via CD in, so the Rotel can resolve as much as 88kHz. Since distortion at -60dB measured 0.24% against a possible 0.03% or so for DSD decoded well, the Rotel only handles SACD for convenience, not to fully realise its performance.

The VHF/FM tuner is a good one, with wide flat-ish response to 17kHz before an mpx filter cuts in to remove pilot tone at 19kHz. Since measuring a respectable 33kHz. Since fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

CONCLUSION

Listening to music through the Rotel RSX-1550 from CD, DVD-Audio or Blu-ray, I appreciated its rock-solid delivery, soundstage depth and generally subtle performance. The VHF/FM tuner was impressive too, so the receiver manages very well at a fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.

VERDICT

Fine sound quality, but very short on features at a high price.

FOR

- most digital formats
- good VHF/FM tuner
- punchy sound

AGAINST

- no DSD decode
- no display mute
- no internet radio

The chunky Rotel produced 112 Watts into 8 Ohms and 170 Watts into 4 Ohms, most loudspeakers nowadays being nearer 4 Ohms than 8, so it will deliver plenty of punch in practice. Distortion was very low right across the audio band, and especially at high frequencies as measurement suggested it would, reminding me that Rotel are a hi-fi company and know how to design a good amplifier. Input sensitivity was on the low side at 370mV via CD in, so no treble spikiness with neither the slight softness that was on the low side at 370mV via CD in, so the Rotel can resolve as much as 88kHz. Since distortion at -60dB measured 0.24% against a possible 0.03% or so for DSD decoded well, the Rotel only handles SACD for convenience, not to fully realise its performance.

The VHF/FM tuner is a good one, with wide flat-ish response to 17kHz before an mpx filter cuts in to remove pilot tone at 19kHz. Since measuring a respectable 33kHz. Since fundamental operational level. It does what it says on the can, and does it well. Sadly though, it could have been better still. Let down by poor user menus, dubious styling, mediocre displays and an absence of features, it may struggle in a fiercely competitive market. Sometimes, good intentions just aren't enough.
As its name suggests, Kudos’s C30 floorstanding loudspeaker has been acclaimed for its expansive and engaging sound. So will David Price pen a paean of praise for it? Read on to find out...

From the spry, smooth, expansive panel sound of Quad’s 2805 electrostats to the clarity, space and speed of Martin Logan Spire hybrids, from the translucent cohesion of Vivid’s BI moving coil multi-ways to the gripping lyricism of Tannoy’s Prestige Kensington Dual Concentrics, there is so much to choose from if you have over £5,000 to spend on a pair of loudspeakers.

The choice can’t be likened to alternative cover versions of the same song, either - because Quads use dramatically different technology to the Tannoys to physically produce the sound, for example. It’s not just about slightly different renditions of the music heightened by marketing hype then, but basic differences in the way the music is played, thanks to the fundamental physics of the transducing process itself.

Indeed, the diversity is so dramatic at this price point that buyers looking to spend one tenth of the money should thank their lucky stars, as they have far less profound decisions to make. For example, if you want ‘warm’ then there’s the Q Acoustics 1050, and if you want ‘cool’ the KEF IQ50 does the job. For all other combinations, refer to a couple of products from Monitor Audio, Mordaunt Short and Acoustic Energy and that’s your lot. Mind made up in the space of an hour or two in a dealer dem room, with no searching “how do I listen to music?” type questions needed!

Where then does the £5,250 Kudos...
C30 come in, in the great scheme of high end loudspeakers? Well, in engineering terms, it's thoroughly conventional; no charged pieces of plastic film here, or curious metal domes and curvy cabinets. Instead, it's fair to say that this loudspeaker is completely straight down the line, with the only ace up its sleeve being its high quality drive units used, and the loving way in which they've been installed in a well made but standard enclosure.

So then, this won't buy you bragging rights at your nearest audiophile club or with your friends down at the local pub, but that's to miss the point. Whilst I'd always in theory prefer an intellectually elegant solution, ultimately what matters is whether the solution in question actually works. The Ikeda IT-407 tonearm is a perfect case in point, being utterly conventional in design with no trick technology. Yet it nevertheless is made with superlative precision, and both measures and sounds, superb. A wonder of modern science the SME Series V may be with its stealth bomber looks and fancy magnesium materials, but still the Ikeda feels smoother to the touch and sweeter to the ear...

Obviously then, what counts is how well Kudos have fettled those expensive but conventional Seas drive units, specifically a 120mm paper (with Nextel stiffening) coned mid/bass unit allied to the high end Crescendo tweeter, plus another 120mm driver acting as a passive woofer only (making them effectively a 'two and a half way' design). They're all aspirated via a minimalist, low order crossover populated by audiophile components, including Clarity Cap capacitors and silver wiring. The sizeable 1,120x200x270mm enclosure is constructed from solid 18mm MDF, with a choice of cherry, sycamore, walnut, roseanur or oak veneers done to a high standard, while rosewood and ebony are available at extra cost. There are two bass ports, one rear mounted and the other firing down to a black lacquered wooden plinth. Inside the boxes, the enclosures are subdivided internally, so that each cone driver is loaded by its own separately ported sub-enclosure. The ports themselves are large and flared, and have the option of foam bungs. Round the back, two pairs of good quality gold terminals are mounted through a solid recessed panel. The overall impression is of a well made loudspeaker, but still it's fair to say that they don't exactly 'wear their price on their sleeves'. From the outside at least, you'd struggle to imagine them costing more than Monitor Audio's GS60 for example, at well under half the sticker price. Still, one thing I did heartily approve of is how easy the Kudos C30 is to position. They seemed to work well from the word go in my medium sized listening room, although I'd say they're not so comfy closer than 30cm from the rear wall. I toed my review pair in just a little, but only slightly. Do make sure that than the spikes anchor into the carpet properly though, as these are long, tall cabinets with a highish centre of gravity.

"through the C30s, the song flowed beautifully, romping along with all the enthusiasm of a puppy in a park..."

SOUND QUALITY

The Kudos C30s have an interesting sound, but much as I liked it, I could never describe it as neutral. Switching from a loudspeaker such as the Vivid B1 or the Quad 999s that were - at different times - also in my listening room and both of which sport smoother response plots, it was obvious that there's a degree of top end lift going on, giving the sound an atmospheric presence. Of course, if the Kudos drive units were less than couth, this would be less than pleasant but happily this wasn't the case, so whilst the treble was certainly explicit, it wasn't hard. Likewise the low bass, which although less than pleasant but happily this wasn't the case, so whilst the treble was certainly explicit, it wasn't hard. Likewise the low bass, which although sounded no less urgent through the C30s than others, yet didn't quite have the bite. Still, the song flowed beautifully, romping along with all the enthusiasm of a puppy in a park.

Moving to the modern structures of 4hero's 'Give In', and again I found the soft warmth of their bass evident, but if anything it had a euphonic effect. Low bass is limited, lacking the subterranean extension of my reference Yamaha NS-1000Ms for example, but slightly further up the bass guitar fretboard the big Kudos floorstanders sounded richer and more 'frothy', filling up the room with a sumptuousness that underpinned the song beautifully. There is the slightest sense of both the ports working, and also the cabinet playing its part, but it's not an unpleasant effect and doesn't impede what is a commendably supple and fluid low end.

Moving up the scale, there's a delicacy and precision to percussion, helped no doubt by the fine quality tweeter, that catches the leading edges of the notes deftly yet relays them with finesse. On this track, vocals came over in a pleasant if slightly recessed manner; there's a sense that the C30 isn't projecting them with the clarity of some price rivals, and neither do they have the accuracy of placement either. I found...
Our current pre-owned stock list:

**AMPLIFICATION**

- **T+A Power Plant**: Ex-dealer, unmarked. M&F Choice. Best buy award. Stunning integrated amp and a great saving on new price. (£4890) EPOA
- **NAD Master Series M3 integrated amplifier**: One owner, brand new and only 8 months old. M&F Choice Editors Choice award. Balanced design with dual mono amplification. Stunning performance. Unmarked condition, boxed. (£3800) EPOA
- **T+A Canvaso**: One box CD, tuner, amplifier. Can be used with the built in speakers or as a pre with other amplification or with active speakers. Just got a best buy award at Hi-Fi Choice group test (June 2019) £1695, ex-demo. EPOA
- **Vwace MD85mm Valve mono-blocks**: 1 owner from new and very very rare indeed. Stunning reviews. Cost new £17000 16 months old only, unmarked condition, original boxes and packing. Price includes a 5-year warranty for the new owner. £7995
- **Pintoix P8 Power Amplifier**: Boxed, excellent condition. One very minor mark to front plate. One owner from new, great reviews. (£999) £495
- **MSL 7208 Integrated amp**: 1 owner, boxed, manuals. As new condition. Brilliant reviews. (£500) £4878
- **Van den Hul (VdH) Array A-1 pre-amplifier**: One owner from new and a very rare item indeed. Cost £3000 when new, this pre-amp will surprise many with its incredible performance. £1315
- **MBL 6101D Reference Pre-amp**: Boxed in its new condition, one owner, from new and a huge saving on new price. (£16000) £7999
- **Quad 909 Power Amp**: One owner, 4 months old. Unmarked, boxed, manuals. (£999.95) £625
- **ASR Emitter II Exclusive (Version Blue)**: One owner from new and only 15 months old. This is the full 4-box version (150kg) with built in power conditioners. Comes with the excellent original 20amp power cables. Back with silver side corners. Unmarked condition and a unique opportunity. Latest model with gold credit board. (Retail cost £14500) £7995
- **Eastern Electric MiniMax Pre**: Boxed in its new condition, one owner, from new and only a few months old. 5-year warranty. FREE Chest SuperScreen mains lead (£995) Fantastic review. (£1195) £795

**DIGITAL**

- **MBL 1431 CD Player**: This Red Book CD Player has been heralded as the best CD Player that can be bought for under £4000. CES announced the "New King of the affordable high-end CD Player". One owner, boxed, unmarked condition. Boxed, manual, remote. (£3200) £1999
- **Naim CDX2**: One fantastic owner from new and only 24 months old (2007). Unmarked condition, boxed, manual. (£3250) £1895
- **Raysonic 228 two box cd player**: Stunning red book cd replay. One owner, upgrade vintage Millen CD8 values included (cost £300). Unmarked condition. (£8300 - £1100 inc values) £4295
- **Acoustic Arts DAC1 mk4**: Fully balanced or single ended operation, current spec. One owner from new, unmarked boxed. Manual, 5-year warranty for the new owner. (£3350) £2295
- **Meditone MDCD201 SADC player**: One owner from new in outstanding condition with original box packing. Great reviews. Built in pre-amp, so can be used directly into a power amplifier. (£2495) £1895
- **Rega E525 Series 2 one owner from new, unmarked condition, boxed, finished in the premium Graphite, manuals, remote. (£1400) £895
- **Linn IItmo CD Player**: Absolutely mint condition. One owner, boxed, manual. A simply stunning red book cd player. Uniquely, the Linn has an AES/EBU digital output, making it an excellent transport for use with high-end DAC. (cost new £2000) 5-year warranty £949
- **MBL Platinum DAC II**: One owner from new. Amazing Stereophile review. Boxed, manuals, unmarked. With volume control and balanced analogue input. (£6000) £2650

**LOUDSPEAKERS**

- **Acoustic Energy AE mkll reference speakers (£2441)**. Finished in the premium Piano black with matching AE1 reference stands (£400). One owner, unmarked condition. New was £2841. Now £1395
- **MSB Platinum DAC III**: One owner from new. Amazing Stereophile review. Boxed, manuals, unmarked. With volume control and balanced analogue input. (£6000) £2650
- **LOUDSPEAKERS**

**CABLES**

- **Isotek Premium Mains Cable**: Boxed new, unused. Huge saving on new price. (£599) £425
- **Isotek GII Minisub**: Boxed new, unused. (£302) £225
- **Whest PS20 complete with MSU20**: One owner from new, stunning 2-box phono stage in black. original box and packing. Incredible reviews. (£1200) £595

**Mains Conditioning**

- **QED Gondola/MIDIMains blocks**: £6-way mains filtration and proportion hub. Unmarked condition. A bargain at this price. (£235) £119
- **Vertex AQ Taja**: 6-way distribution mains filter. Great reviews. One owner from new, unmarked. (£808) £595
- **Vertex AQ Jaya**: boxed with manual, some very light marks, one owner. (£103) £225
- **Isetek MiniSub**: boxed new, unused. Huge saving on new price. (£599) £425
- **Isetek Premium Mains Cable**: Boxed as new - 1.5m - Three Core Annular Ground Copper for better signal transmission - (£75) £49

**CABLES**

- **QED HiRes Solitorn XLR interconnect**: 1.5m. 8-months old. Original Technical specifications for the new HiRes range of cables. As new condition, stunning performance. (£2990) EPOA
- **MBL 111E Loudspeakers**: Finished in black. One owner from new, very very rare. (£24500) £15475
- **Tannoy ST202 super tweeters**: Top of the range and only 4 months old. One owner from new, boxed, unmarked. Being sold only as a package with the Superlinks below. (£120) £749
- **Tannoy Superlinks**: - for use with any Tannoy super tweeter. One owner only 6 months old. As new (£300) £150

**ANALOGUE**

- **SME 3022a**: complete with SME V armhead. One owner from new. Boxed in excellent condition. Price includes a low hours Ortofon Rohmann Cartridge that cost new over £1000 (£6995) £7999
- **Weste Electric Minimum Phono Stage**: This probably holds a record for the most outstanding reviews of any product currently available. Boxed in unmarked condition. One owner from new, only a few months old. Simply sensational (£1895) £949
- **Whest PS20 complete with MSU20**: One owner from new, stunning 2-box phono stage in black. original box and packing. Incredible reviews. (£1200) £595

**Mains Conditioning**

- **QED Gondola/MIDIMains blocks**: £6-way mains filtration and proportion hub. Unmarked condition. A bargain at this price. (£235) £119
- **Vertex AQ Taja**: 6-way distribution mains filter. Great reviews. One owner from new, unmarked. (£808) £595
- **Vertex AQ Jaya**: boxed with manual, some very light marks, one owner. (£103) £225
- **Isetek MiniSub**: boxed new, unused. Huge saving on new price. (£599) £425
- **Isetek Premium Mains Cable**: Boxed as new - 1.5m - Three Core Annular Ground Copper for better signal transmission - (£75) £49
strains of Kraftwerk’s ‘Musique Non Stop’, and these loudspeakers did less well. Here I could discern the C30’s editorialising just a touch too much for their own good. Where both the Yamaha NS1000M and the Vivid B1 tried their hardest to do a disappearing act on this track, the C30s were very much the elephants in the room. True, they imbued the song with a satisfyingly big bass once again, but it was obvious that in terms of speed they couldn’t hold a candle to the other two. They seemed to sit on transients slightly, slowing them down and reducing their dynamic impact, whilst at the same time adding a ‘thump’ all of their own. Across the midband, the C30s threw out a wide soundstage, but it was quite diffusive all the same, seeming unable to commit to precisely where particular elements of the mix were supposed to be. Again, there was a subtle loss of low level detail across the midband, although the treble was anything over explicit, adding an artificial atmosphere that simply wasn’t present on the original recording. I did still enjoy the Kudos C30 via Kraftwerk, but felt it wasn’t telling the whole story all the same.

Ultimately then, this big and expansive sounding box is just a little too characterful to be suitable for all types of music. Although tuneful, its low end is a little slow and too prominent for some, whilst the midband has a pleasing tone but can seem opaque with music of the highest intensity. Treble has space, pace and grace, but like the bass can seem a little obvious. The Kudos C30 certainly plays a tune well, but is not the most dynamically accomplished with the last few percent of a vicious snare drum thwack. Still, its sizeable physical presence and naturally rhythmic gait means that it doesn’t sound strained, nor ever like it’s trying too hard.

CONCLUSION
With over £5,000 to spend, you need to know what you want before you go out and buy it. Some will want the forensic precision of a speaker such as the Vivid B1, others will crave the delicate and dark sounding Quad 2805. If you’re minded to choose an altogether more characterful loudspeaker however, you could do worse than consider the Kudos C30. It’s not all things to all men, but those seeking a large, airy and spacious sound that’s nicely finished will like it. Moreover, it should prove a fine match for somewhat cold and clinical sounding transistor power amplification, which will gain in expression going through these. In absolute terms then, the Kudos C30 is not a great loudspeaker, but it’s an interesting and enjoyable one all the same. If you’re in the market for a sizeable and sumptuous sounding floorstander, make sure you give it an audition.

REFERENCES
Sony TT-S8000/0L Silver/Ortofon Winfield turntable
A.N.T. Audio Kora 3T Ltd. phone stage
Sugden IM4 integrated amplifier
Yamaha NS1000M loudspeakers
Vivid B1 loudspeakers
Quad 989 loudspeakers

MEASURED PERFORMANCE
Frequency response of the C30 is dominated by tweeter output +5dB above that of the bass/midrange unit, a massive lift that will make the C30 sound obviously bright, by a considerable degree. This is not an accurate loudspeaker by any stretch of the imagination but has been voiced to stand out in the showroom perhaps. Output from the bass/midrange unit is fairly flat and even, extending down to a peak at 80Hz our third octave analysis shows, a classic under-damped response that will give lively bass. The large rear port lifts output around 50Hz, and it measured 7dB up on forward output at 80Hz so its contribution to subsonic output is considerable, giving the C30 plenty of bass lift.

The impedance curve has some steep slopes so it is reactive around 2kHz. The bass unit has a 3.5 Ohm DC resistance but overall impedance measures 7.1 Ohms, with pink noise. With a sensitivity of 87dB the C30 does need huge amounts of power to go loud but it is not an especially load all the same, by current design standards. A 200mS decay spectrum showed the C30 is reasonably free from colourations except for some overhang at 80Hz where the cabinet peaks. The bass and midrange look clean though, with just a little cabinet colouration around the 700Hz region clearly seen from rear port output (red trace), as well as the forward decay spectrum.

The C30 has been engineered to sound big and very lively. Its treble is very prominent though and may overwhelm all else. NK
Letter of the Month

ONE WAY

The comment on the ‘mediocre bass response’ of unipivot tone arms in the Origin Live Conqueror arm review brought to mind an experiment I did a couple of decades ago with a Keith Monks mercury unipivot arm.

For those who don’t recall the Keith Monks, it was a quite interesting, innovative design originating around 1970 or so. There were two particularly interesting design factors. The first and most obvious were the mercury baths used to transmit the signal from cartridge to the arm leads. The signal went from the pickup to 4 pins in the pivot area that sat in 4 small, mercury baths and then to the output. This allowed the entire arm (wand with counter weights) to have no solid connection so it could simply be picked up off the pivot post. This made it simple to change cartridges even with the non-detachable head shell and to have multiple arm/pickups set up and changeable in seconds. The mercury baths, though, were most responsible for the loss of favor of the arm in later years (as well as the very low effective mass) as moving coils took over from moving magnet pickups. The mercury was really not that good an electrical conductor and while it was fine for the higher output moving magnet designs it was too poor for the lower output moving coils. And that’s not to mention the open air mercury baths evaporating into the atmosphere in one’s listening room.

The second feature was the one that was relevant to my experiment. Normally a unipivot is simply a hardened, very sharp point that fits in a cup in the arm. But the Keith Monks point never contacted the cup itself. Instead there was a circle of tiny ball bearings just below the cup and the point of the unipivot fitted into them until contact was made without the point itself taking any load.

I decided to try mass loading the pivot area of the arm. I wasn’t worried about harming the unipivot point with the extra load because of the design explained above. And I figured that since the extra mass was at the pivot point I wouldn’t significantly affect the effective mass of the arm. I piled a large amount of Mortite (sort of like Blu Tac) on top of the arm at the pivot. And to make it appear reasonable I wrapped the Mortite with some aluminum foil and topped it with a 45 RPM adapter.

Everything tightened up. The improvement in the bass was most noticeable but the increased focus and detail was obvious bottom to top. By the way I need to admit that the idea for the mass loading was not original with me. I got it from Magnepan, the speaker manufacturer, who at the time made a unipivot arm (with more conventional bearing arrangement) that employed high mass in the pivot area. I have occasionally wondered why no one ever pursued this concept further. It could lead to an arm that combined the advantages of both the unipivot and conventional format.

Allen Edelstein
New Jersey, USA

Thanks Alan. I too once used the Keith Monks but mercury is poisonous, difficult to handle, suffers an oxidised surface scum and used to rot the copper pin contacts, I seem to recall. I soon fell out of love with it! Having used Decca International, Hadcock and various other Unipivots I eventually gave up on the idea, as none of them seemed to offer a particularly firm, well defined sound: it was all too nebulous for me. Since looking closely at the importance of correct headshell azimuth, using the Adjust+ measurement and set up

46 HI-FI WORLD SEPTEMBER 2009 www.hi-fiworld.co.uk
system from Dr Christian Feickert, in our September and October 08 issues, I suspect allowing a cartridge freedom of movement in this plane is not a good idea, even if you do pile weights on top. These days, a better understanding of the sonic properties of an arm's structure is being pursued, by us using an accelerometer to measure headshell behaviour and by Karl Heinz Fink, who reports similar findings using a Polytec laser interferometer.

**GLOWING PRAISE?**
The DIY features included in Hi-Fi World which have set the magazine apart from the competition seem to have changed greatly in character. In one way this is good since at one time all we seemed to get was yet another valve amplifier until virtually all the possible circuit configurations had been used up and little else. While I like valve amps and building them, I did find myself thinking that the budding speaker builder or digital constructor was not really getting much of interest. Things have changed greatly now, speakers are now taking centre stage to a large extent probably because they are the main interest of Peter Comeau, I would suggest that a better balance could be struck.

I found myself interested in the remote control unit recently introduced, thinking that here was a unit I could probably use. I had gained the impression, rightly or wrongly (wrongly as it turned out), that it would be in a separate box. This would have enabled me to replace the pot in my home built 211 integrated with a motorised version and bring out the motor leads to the external unit. I could omit the components for input switching which I do not need and program it to my remote control. As presented it will not do that and is not even retrofittable to previously constructed pre's. Since remote volume control is so useful, and remote input switching so rarely used, a simple externally housed control unit which can be added to a standard World Design pre, or a home constructed integrated could prove very popular. How about it?

Noel Keywood’s review of the Icon Audio MB845 is a good example of the kind of review which seems to have a broad appeal even amongst those who would never dream of buying one. A review of something so different to the norm almost guarantees to raise the curiosity and makes very interesting reading and a good read is what sells magazines. Noel does, however, seem just a little confused about the hierarchy of the 211 family of valves. Basically the hierarchy is this.

211 - Described by General Electric as a General Purpose Pictorion it is a medium mu power triode which means that it has a high anode impedance. This makes it suitable for Class B transmitter service. It can be used as an audio amp but requires a high impedance load and is unable to provide a lot of current even with the grid at zero volts. For good power it must have either a very high HT voltage or the grid must be driven positive, Class A2, which places big demands on the driver stage.

805 - A development of the 211 specifically for transmitter use it is a high mu power triode with a very high anode impedance. The grid has to be driven positive to get any real current through it, eminently suitable for class C radio work. It is possible to use it as an audio valve but it isn’t really suitable. For hi-fi use it is a non - starter.

845 - Specified by RCA as an audio power triode this is not a radio valve, it is a straightforward audio valve. It is a low mu power triode with a moderate anode impedance and will pass plenty of current without need to drive the grid positive, indeed the grid is not designed to handle grid current so this should be avoided. The 845 has a higher anode dissipation than the 211 and can deliver more power. It’s requirement for considerable negative grid bias voltage means that lots of signal volts are required.

Both the 211 and 845 are very linear. In working with these valves I have found that for best sound an HT voltage close to the maximum of 1250 is needed. If a moderate voltage is applied and then progressively raised a point occurs where the afterburners kick in and the sound takes on the colour and life that these valves are renowned for. This is rather inconvenient since power supply is greatly simplified if the HT is kept below 1000 and at these higher voltages more bias is needed and the grids more difficult to drive - but it is well worth it.

There is a world of difference between the Icons and the parallel single-ended amp. From my experience I would guess that the single ended would blow the push-pull Icons into the long grass. Single-ended well engineered really is that good. You really don’t know what the 211/845 can do until you’ve heard a good single-ended. I use a 211 single ended at 1,200 volts HT which I built 12 years ago. It has never given a day’s trouble and easily delivers enough power for my 12” Tannoy Monitor Golds in 65 litre cabinets. Musical bliss!

Dave Dick

Thanks for the interesting letter Dave - and the earwigging at the Bristol Show! The exigencies of life are a little beyond my control - as hard as I try! - so if amplifier designer extraordinaire Andy Grove is with us we can publish superb valve amplifier designs, but when he goes to work for Audionote, then we cannot. And when loudspeaker designer extraordinaire Peter Comeau joins us we publish great loudspeaker designs, but when the Chinese lure him away, we cannot. As much as I’d love to be able to wave a magic wand, Harry Potter-style, to solve this problem I am afraid there will always be dark forces I am unable to defeat! Good designers are not easy to come by, and we only ever publish DIY articles and circuits that meet the highest standards, something everyone appreciates. I’m aware that our quality amplifier and loudspeaker designs are popular and much discussion is taking place on this subject, so I am trying to rectify the situation.

Look at the RCA spec sheet for the 845 and you will see it described as a "modulator and audio valve" so it is used in transmitters, if not as an output device, so transmitting valve is a common enough if perhaps loose description. Please allow me a little journalistic leeway here!

I’m sure readers will be interested in your observations, and your experiences with a 211 amplifier. NK

**HARD TALK**
I would like to disagree with Noel. It is probably the first time, but it is not strictly on a hi-fi issue, so I am not too worried. In June 2009 he said he can’t trust hard drives. He further argues that one doesn’t have to back up CDs or LPs. I don’t think I am alone in having numerous CDs ‘failing’ or
having the odd LP becoming unplayable. If that happens then you try to replace the article in question, you don’t give up on the format. The difference with a hard drive is that if it fails your whole collection is lost. Even if you still have the original music it may still mean a lot of work to recover from the loss. In the letter Noel was responding to, Brian Garner had proposed a RAID system to keep a constant back-up. I would say for a music only collection this is unnecessary and largely self defeating. Disc failure is measured in Mean Time Before Failure (MTBF). RAID systems are failures from time to time. Apart from all the piddly Flydrives and suchlike that expire regularly, I bought an early LaCie 1 Terrabyte drive for video storage and its controller packed up in just three months. Luckily, the discs were okay and I managed to retrieve all data simply by installing them in the host computer, but losing 1 TB of data means whole music, picture or video collections to could up the swanry, not just a single disc or tape. So large capacity hard drives have the potential to row us into a lot of trouble, something that is worth bearing in mind. NK

It’s a fair point to make, I think, that hard drives are not as hardy as some believe. Just because one person hasn’t had an HDD failure in no way means another person won’t. With this in mind, you do have to be rigorous in backing up your hard drives, be they for music or anything else. That’s why I think Naim’s system used on the HDX is an elegant one; left permanently on, the HDX will back its primary drive up to its reserve drive, discreetly and usually in the middle of the night. The system has been criticised for some being over the top, but obviously only by those who have been lucky (so far) in life’s hard disk lottery! DP

SPIN DOCTORING

I have been an avid reader of Hi-Fi World for the past few years and notice that from time to time you mention the Technics SL-1210 (or SL-1200) turntables, usually in answer to reader’s letters wanting a reasonable mid-price solution to spinning the black vinyl! As the owner of a NAD 533 Turntable (re-badged Rega Planar 2) fitted with a Goldring Electra cartridge, I was pretty sure I was missing out on a lot of the information contained on my black stuff. The rest of my kit (Cyrus 2 + psx amp, TDL RTL3 ‘speakers) seemed pretty good at reproducing CD (from an Arcam CD73). So I thought...let’s give it a go...see if I can improve my vinyl sound quality. So, as I already had a mint Rega RB250 (on my NAD) to hand, the first thing was to find that turntable. The obvious e-bay source turned out to be a bit frustrating. I think too many people have been reading Hi-Fi World and are chasing all those Technics decks that constantly appear on the site. Prices for a turntable in some far off place (which you can’t even inspect first hand) rising to anywhere up to £180-220 (plus £30 delivery in most cases). So I took the alternative route of checking the Free Ads websites.....and Gumtree came up trumps! The Advert said the turntable was only purchased in late 2006, never raced or raffled (being part of a bedroom set-up) and still with all the original paperwork (instructions, sale receipt, warranty). No box, but hey- ho you can’t have it all. The guy lived only about 60 miles from me too and wanted £150! So I e-mailed him asking if it was still available and (cheekily) if it was, would he accept £135 (thinking that paid for my diesel costs). The reply was positive...Yes it was still for sale and yes he’d accept my offer. So a date and time was agreed and I set off to deepest Ramford.

Upon arriving at the address, the door was answered by an affable young man (in his mid-twenties I guess) and after saying hi to his Mother, I was ushered upstairs to the mixing room, aka the chap’s bedroom. There he had two SL-1210s, a mixing thingy and a DJ CD thingy...along with amp and behemoth (unidentified) speakers. I was thinking ‘pity the neighbours’.

The turntables were both immaculate and had obviously never left the bedroom since he bought them. He showed me the original receipt, demonstrated that it actually worked (playing some Drum’n’Bass) and the money exchanged hands. He disconnected the Technics and I went over to pick it up from the shelf upon which it stood. My God I uttered... the thing weighed a tonne (eleven kilos to be precise) and I was immediately struck by its rugged construction (investment cast I think with a rubber cover).

After I had got it home, I studied the instructions and then truly marvelled at this fine piece of Japanese Engineering. Okay, so the arm is not rated (by the audophile press at any rate) but just feel the quality, marvel at the little pop-up light that helps you guide the needle into the groove or the way the on-off switch clicks positively between positions (and then doubles up as the red strobe source). I don’t particularly see the need for the pitch control with its green light (the speed seems spot-on) but it again feels good in operation. Compared to my piece of MDF; for that is the basis of my old NAD 533, it shouts value for money (I’d even go so far to say I’d actually PAY £450 for a new one!).

Anyway, I ordered an Origin Live arm mounting plate & adaptor and bought a new Goldring 1012GX to fit (as this seems to be highly regarded by the Hi-Fi press). Once it had all arrived, I then stripped the Rega arm off my NAD (5 mins) and carefully dis-manthed the Technics (for that is basically what you have to do in order to fit the arm) bagging up and labelling all the fixings to make sure they went back into the correct holes on re-assembly. The whole operation took me about an hour.

With the arm fitted, I mounted the cartridge (using a downloaded template) making sure the screws were tight, then sat down with a beer to have a listen to...
Another chance to feast your eyes upon this exotic combo! It’s an SME V one-piece cast magnesium tonearm with Koetsu Red MC cartridge, mounted on a Technics SL-1210 turntable fitted with a Timestep external power supply by Soundhi-fi.

Now this is where I take to task all those who immediately go into paroxysms of acoustic delight whenever they apply a mod to their equipment and are deluded into believing they are hearing an improvement to the sound! They often are most certainly not. These would be the same people who want to switch off the strobe light on the SL-1200 which they can see, whilst the unseen transformer is rattling away like a cowbell in a stampede!!

For instance, the plotters on the Technics turntables have a rim on the outer edge that really serves no more use than being cosmetic. However, if the mat is any larger than 287.2mm (and most are I believe) it can be of critical importance when adding this mat to the platter because all it will do is sit on the rim edge with no contact where it matters. The result is indifferent sound quality and in fact an impairment, as I very quickly discovered. I will say I had not added the little cork pieces, provided by Origin Live, to the platter which effectively raises the mat above the rim as these were offered as an option for sound improvement to be tried subjectively. Indeed, the soft rubber mat offered with the SL-1200 also overlaps this rim! The use of a record weight (I machined my own from cast lead) can make matters worse, predicated on the stiffness of the mat, as it will deform the record during playing.

The heavy copper mats becoming popular are even more of a problem as even copper will effectively oscillate or vibrate at a harmonic if treated like this and at 3mm thick they will not distort to contact the platter!! Otherwise they represent an excellent option as they add a relatively dead mass to the ‘rotating system’. For anyone contemplating using any sort of mat on the SL-1200 platters, it can be no more
did you know that many of the adverts you see in the 'uk hi-fi magazines' are created by us? we arguably design more hi-fi adverts than any other design agency in the uk. above you will see a small selection of our advert designs - 96 of them in fact...

audiography

email: design@audiography.co.uk  web: www.audiography.co.uk
tel: +44 (0)1273 394 184  mobile: 07590 900 320

SEPTEMBER 2009
company in the UK does in fact offer an external power supply to do this job, but I have had no luck contacting them.

The enhanced power regulation will be particularly advantageous to those using the 2kg copper mats as more current will be required to bring it up to speed and sustain exact speed due to the added friction on the spindle thrust bearing.

Which now brings me to the ultimate improvement, the bearing assembly. This consists of a 7.125mm spindle rotating in a phosphor bronze bush, the thrust bearing for which is a sliver of what appears to be ceramic contained in the bottom bearing seat. The ‘fit’ of the bearing is not exactly of high precision, as movement of the platter can be detected when the platter is alternately lightly pressed down at the rim across its diameter.

I have come up with a much improved proposed design which uses a 1.4mm shaft ground from solid carbide and which incorporates the platter taper and top record locating spindle all as one piece. This will rotate in a precision honed bearing fitted to a tolerance of 0.005mm. The thrust will be taken by a ceramic ball housed in a PTFE hemispherical pad and rotating in an oil bath. The whole will be housed in a solid brass housing designed to be an exact replacement for the existing unit I am replacing. However, if you over-size the spindle this will draw howls from users; better to under-size so as the record is now rotating out of the centre, as most probably are!

I have specified a diameter of 7.25 for my new spindle and am prepared to open up the hole with a reamer if I get an LP that is too small.

I believe that if all of the above modifications are carried out then the effect will be to have an excellent quality turntable that will out-perform most of the elastic band models selling at silly prices.

On a final note, no pun intended, I read your technical reviews with much interest. However, do you think you can be more consistent in the way you do or do not provide measured data. For instance, in a recent article on a tone arm you provided a graph which in my mind condemned this particular arm for it's very high resonant peak at 250Hz. However when reviewing the new carbon arm from Origin Live, 4 pages on, you supplied no data whatsoever. The cynic might be caused to think that this is because it is to bad to publish!!

Mike New
Sydney, Australia.

Hi Mike. That is all very interesting - real hardcore DIY and there's nothing quite like it! I presume the UK supplier to which you allude is Soundhifi who have put a lot of info up on the 'net. Readers can find then at: www.soundhifi.com/SL-1200/index.htm. As Soundhi-fi have a stand at most UK Shows and the ever enthusiastic Dave Cawley bends my ear at length over the issue of turntables, arms and everything to do with them, I'm sure you can get into contact with them; Dave isn't backward about coming forward, as they say. Anyone wanting an SL-1200 modded should contact Soundhifi. We run a couple of old Pioneer Direct Drive (PLC-590s) as test mules and I am wondering about an SL-1200 as a future replacement. Your observations on the Technics bearing are intriguing and we look forward to learning about your new replacement. However, if you oversize the spindle this will draw howls from users; better to under-size so...
MOON
CD3.3/i3.3
Classic styling, class leading performance.
Multi-award winning CD players, phono stages, integrated, pre and power amplifiers from Canada's finest – Moon Electronics.

DISTRIBUTED IN THE UK BY RENAISSANCE AUDIO – WWW.RENAISSANCEAUDIO.CO.UK
The turntable that centred discs for you: Nakamichi’s amazing Dragon.

all LPs drop on. Eccentricity results in a wow component at 0.55Hz and if this is big enough it does degrade pitch stability; there’s a small loss of grip in timing. Nakamichi once solved this with one of the world’s more complicated turntables, I seem to remember. And I must carefully centre our DIN Wow & Flutter test disc, using its locked outer groove, to get representative speed stability figures from turntables under measurement. So eccentricity is an issue. A small, lightly sprung tapered sleeve would auto-centre discs however (I’ve just thought of it!) - see my diagram. It’s simpler than Nakamichi’s solution.

We cannot, in all cases, measure an arm for entirely physical reasons (i.e. we don’t have it to measure!). If it is fitted and reviewed off-site it isn’t always practicable to break down the entire turntable and arm assembly for shipping to our London offices for measurement, where it must be built again, before being disassembled for return. Why? One reason is time and the other is shipping damage: the boxes are thrown from lorries and the more we move a delicate item the more arm assembly for shipping to our figures from turntables under measurement. This was caused by it being thrown off a lorry. Old Classics sent in for review in makeshift packing suffer especially and we advise they are not shipped by couriers because of the likelihood of damage. So as usual, it’s a case of Cock-up, not Conspiracy! We try and measure arms though, using an accelerometer to assess vibrational signature, and are surprised by how much interest this has generated around the world.

You do not have to write peons of praise to us to get a letter published. We publish letters solely on the basis of their general interest to readers. NK

Hi Mike - thanks for your excellent, considered contribution. As you’ll probably have read by now, last month I tried a Timestep power supply for the SL-1200 and (also fitted an SME Series V and Koetsu Red too). The results were breathtaking, and whilst I’d not expect everyone to similarly equip their SL-1200s, it just shows you what’s possible when serious attention is paid to the power supply.

My only other comment is about mats: I find the SL-1200 (with beefier power supply or not) doesn’t like mats that are too heavy, such as the Rubato pure copper mat (reviewed in the May 2009 issue of Hi-Fi World). Whereas the SDS Isolatmat adds a small amount of useful mass to the platter, giving a less edgy sound, the Rubato seemed simply to get the Technics motor servo working overtime, resulting in a more forced, strained sound. So I think there’s a ‘critical mass’ there, and we need to find it. With this in mind, I’d be interested in your or anyone else’s follow up comments. DP

EASTERN PROMISE?

My Domestic Director (Significant Other) has decreed that I can only listen to my hi-fi at levels not much higher than conversation level, which is very low. My present loudspeakers are the Linn Index II. At low levels these loudspeakers sound insubstantial and weedy. I need a pair of loudspeakers that perform well at low volume levels. A friend of mine who distributes Harbeth locally says his brand of loudspeakers is suitable for such listening purposes. He recommended the HL-3P (now in ES-2 guise) and Compact 7 models to me. However, I countered him by saying that these are low to medium efficiency loudspeakers. I have heard reviewers say high efficiency loudspeakers sound lively whereas low efficiency loudspeakers are more laid back and duller (volume levels not mentioned). Therefore, the latter require high-powered amplifiers to bring out the sound (presumably resulting in high volume levels). This would be prohibited in my domestic environment. I covet your comments on these statements and request your recommendation for suitable loudspeakers that will sound good at low volume levels in a 2.5 x 3 m (sparsely furnished) living room. I listen to middle-of-the-road music. The Index are connected to the Linn Classic but I do have a range of amplifiers from the Naim NAIT (I) to the Quad 909.

best regards,

S. P. Tan
Upper Thomson Road, Singapore

Hi Simon. Sounds to me that what you really need are headphones. It is almost impossible to get much from loudspeakers at very low levels, as all low level information is smothered by background noise, perhaps of cricket where you live. A pair of KEF Q30s are worth investigating as they are compact, will take up little of your room’s space and also sound lively and dynamic. NK

I think you’re in a bit of a muddle here, S.P! Starting from first principles, you have a small listening room for which you need smallish speakers. If you get big ones (or even medium size floorstanders), they will simply set the room off with all manner of booms and thuds. Speaker-room interaction, or lack thereof, is your priority. With this in mind, the Spendor S3/S5 mini-monitors (£725) are a good starting point, with a very clean and smooth and even sound. I use a pair in my smaller secondary listening room, and find them most enjoyable; far superior to the likes of Linn Indexes. There’s now another one to consider too; the Audiosmile Kensal. These are about twice the price of the Spendors, and use ribbon tweeters and metal midbass units, so are a bit more engaging and analytical, but even more transparent than the Technics. Whereas the SDS Isoplatmat adds a small amount of useful mass to the platter, giving a less edgy sound, the Rubato seemed simply to get the Technics motor servo working overtime, resulting in a more forced, strained sound. So I think there’s a ‘critical mass’ there, and we need to find it. With this in mind, I’d be interested in your or anyone else’s follow up comments. DP

PUBLIC APPEAL

Dear Sir. You know I think that music critic from the Telegraph is right. You don’t need great hi-fi to appreciate great music and performance. How many of us started listening by playing 45s on
in the early 1970s (BSR decks and level of quality than I was listening to the iPod) deliver music at a far higher level of quality than I was listening to the Walkman (and phones. Music at their convenience. Not to mention how many of us have really had a good experience buying hi-fi. Either now or in the past? How many of us have wanted to buy something to find out it's only available many miles away? Or a retailer can’t (or won’t) sell an item in one town because you live in another and they have agreed with the manufacturer not to provide items by mail order. You see, it's not the hi-fi that has a problem. These days it sounds better than ever. It's the way hi-fi manufacturers choose to interface with me. Joe Public. Why do lots of people flock to Tesco for a £16.99 CD spinner? Because it's convenient and good value. not because it's the best they can buy.

Recently you reviewed the excellent new Rega deck. It costs £500. How can a music loving teenager with shallow pockets even dream of such things? “Aaah”, you say. “I was always thus”. Yes, it was. I was one of those spotty teenagers who took the number 12 bus to Regent Street and spent a couple of hours drooling in the Sony shop circa 1976 (I wanted an Elcassette). But because music and hi-fi was in the “mainstream” for consumers I cobbled together what I thought was hi-fi fairly easily and cheaply. Nowadays the young don’t have to. They have their ipods or phones. Music at their convenience. Not the convenience of record companies or hi-fi manufacturers and retailers. Things have changed. iTunes has destroyed the record industry. The Walkman and the iPod deliver music at a far higher level of quality than I was listening to in the early 1970s (BSR decks and Audiosmile Kensai - a very high quality miniature for small rooms.

Hi Keith - you make some very salient points. I've long been worried about how hi-fi is going to be sold to a new generation of customers in ‘mature’ markets such as the UK. The problem is that because we had our great hi-fi boom in the nineteen seventies, most specialist retailers are still using a thirty year old approach to selling hi-fi. Whilst there's nothing at all wrong with high quality dem rooms and top quality advice (indeed, it's the Holy Grail), the way this is presented to the public could I feel do with a little more thought.

Most retailers function almost as a library; it's like a club you join, which you attend to gather knowledge. You seek it out, and you obey its protocols, and then somehow it rewards you for your travails. Nowadays though, I think hi-fi retailers have got to start moving more towards the customers (both psychologically and physically), and make them realise they really need great hi-fi, even if they don't know they do yet. I am afraid this involves better people skills and sales techniques than are found in many dealers, which is why some are struggling now. But I remain convinced there are still a great many good dealers around, despite what some forum denizens say. I certainly meet a good few on my travels, and as I always say, there's absolutely no substitute for finding a decent dealer and listening for yourself. If you'll excuse the pun, the simple process of...
aiding two products side by side speaks volumes! DP

TIP OFF THE OLD STOCK
My current system consists of a Project RPM4, Denon 103r, Michell ISO (Tom Evans modified), Grado RA1 headphone amp and Grado 325i headphones. I would like to upgrade my turntable to a Michell TechnoArm as I feel the Project is not doing the rest of the system justice. The reason I am writing is that I'm stuck about which arm would suit the Denon, as I understand that Denons are fussy about arm choice.

Don't get me wrong the Denon sounds good with the Project; however this has been my first and only turntable and so I don't know any different. I have my eye on a Michell Technoarm or a Origin live modified RB250; would these be suitable? I have a budget of approximately £1,000 but would stretch a bit further if necessary. Your opinion would be gratefully received.

regards

Steve Taylor

Spending £1,000 on an arm for a budget moving coil cartridge costing around £300 seems like overkill to me Steve. I know the Denon is hyped up on the net by those who have heard no better as a 'giant killer', but it is not. It provides a tidy sound that is good for the price. A few years ago the rather bland sounding DL103 could be had for around £100 and the brighter DL103R for £180, attractively low prices for what masquerade as high end items. Having spent £100 and gone in my system, searching for ever better sound quality and musical enjoyment, I've made a few sideways and some backwards steps in this hobby, but have a pretty well sorted system in terms of musical enjoyment, and that is the aim of this game. My system comprises Musical Fidelity NuVista 300s driving Sonus Faber Electa Amator IIs, fed by a front end of Chord BluDec 64 MkII. Whilst only the Chord's can be considered modern, I view the NuVista and EAIIs as classics, and have no intention of replacing them unless they fail. Besides, they still got that swing, or more appropriately they have rhythm, dynamics and indefinable groove that connects me to the music which is primarily 70s funk, soul and jazz.

I've been searching for my ideal preamplifier for a while, and have used Musical Fidelity XPre v3 as a stopgap. I auditioned a modified Music First Audio Classic Copper pre-amplifier with MkII transformers in my system, and was very impressed by the top to bottom coherence, and level of additional detail I heard. I was fortunate to see Billy Cobham live at Ronnie Scotts, so playing back his Live in Europe I found his band transported into my lounge. I don't want to use the usual hi-fi cliches, however I heard into the recording and the instruments sounded like real instruments, i.e. the cymbals shimmered instead of sounding like pieces of sheet metal.

So you ask, what's the problem, namely the EAR 868L which has equally glowing reviews. I have a lot of time for EAR designs and am always impressed by their show demonstrations. I just auditioned the EAR 868L at a dealers and had my Musical Fidelity XPre v3 on hand for comparison. The EAR was more musical, the notes decayed and had more body, i.e. a cymbal sounded like a cymbal not a piece of metal, and a double bass had body. Was it 10 times better than my MF X Pre v3, no, but it was definitely more musically involving. Ideally I'd like to demo the EAR 868L in my system, but that isn't going to be possible, so I'd appreciate your comments on how the EAR 868L compares against the MF Audio Copper sonically?

Facilities wise, they give me the same connectivity, and both have remote, so it's down to the musical presentation. I intend the preamplifier to be in my system for the long-term, so want long term satisfaction.

regards,

David Waterman

An interesting question, David. Here we have two (to use the dreadful term that Noel hates!) 'state of the art' preamplifiers that showcase the respective strengths and weaknesses of each design approach. Starting with the MF Audio, and it's simply a transformer volume control, admittedly a very well made one.
and it's really six of one and half a dozen of the other; simply buy the one you think suits your system and/or your music tastes better. Looking at your preferences, my hunch is that you'd enjoy the EAR more. DP

STAGE SHOW

After a couple of decades where my hi-fi interest has been in hibernation I got myself a Squeezebox about a year ago. Suddenly it was fun again. One thing sort of led to another and I got myself a couple of Martin Logan Purity speakers, a Lyngdorf DPA-1 preamp, a Transparent Power Isolator B and my old CD player got thrown out, I guess I got a bit carried away, but now it was even more fun. I then started to contemplate what to do with my rather old record player, a Walker CJ-55 with a Mission 774 arm that I bought in 1981. Also here one thing led to another, now it has new cabling, Van den Hul 502, a new pick up, Benz Ace Law, a new motor, DC 200 from Origin with the advanced kit, and it's been trying to find some info and comments about the Sugden but it seems impossible, so now I am turning to the experts. Do you have any idea how well my Sugden stands up to today's standards? If I were to look for an alternative that should give a real improvement in sound in what kind of price range would you suggest, I am talking about soundstage, details etc. As I mentioned I am really not dissatisfied about the sound today but that damned upgradeitis won't stop itching. 

best regards

Stefan Lagerquist
Sweden

Oh dear Stefan - looks like you've got another dose of 'hi-fi man flu', doesn't it? Your Sugden phono stage is good, like everything Sugden has ever made in my opinion, but it is not quite up with the latest and the greatest. Whilst I realise that phono stages are immensely subjective (more so than you'd think), I personally would suggest you invested in an Icon Audio PS3 if you can possibly afford it. If soundstaging is your priority, as you say, then this just about beats everything I've heard under about £3,000. Being a valve design, it is definitely on the warm and euphonic side, but isn't that what a tube preamp is about? The result is a truly big sound that's cleaner, more detailed and focused and expansive in terms of stage depth and left-to-right soundstaging, as well as having a thumping bass and sweet airy top. By comparison, all transistor phono stages sound ever so polite; you'll get a more clinical, matter-of-fact presentation that rather misses out the heart and soul of the music. That said, there are some such as the A.N.T. Audio Kora 3T Ltd. which don't quite fall down into this trap, simply giving a slightly more ordered version of the Icon Audio PS3's big hearted presentation, so if you can also audition this then please do too. DP

TOTA LLY WIRED

I just subscribed from overseas to your splendid magazine and I enjoy reading every page of it, even the vinyl section, although I got rid of my own vinyl and turntable a few years ago. But hey, you never know, I might start again in a few years.

It is absolutely exciting that the old MM and MC techniques are still being developed and improved significantly. I now have what I consider to be quite a good middle of the road set - according to high end standards that is, anyway. It consists of a Marantz SAB003 SACD player, a Marantz PM7200Ki integrated amplifier (which I, of course, only use in direct source and Class A), and B&W DM604 S3 speakers.

Recently I adapted my cablework from standard to better stuff and I installed Podis Furitech high end fuses. The power cables are now Inakustik Black and White Referenz PC 1502, the power wall plug is HMS, the interconnect is Inakustik NF 102 Black and White Referenz and the LS cable is Inakustik bi-wire Black and White Referenz LS 1002 (4x2,5 mm²).

Until recently I used a very thick Eagle single wire cable (4 mm²). When I applied the Inakustik LS cable for the first time I, of course, got rid of the terminal bridges on the B&Ws. At first I was really happy with the increased detail in the sound reproduction. Especially the mid-high was much cleaner, more detailed and focused and

The listening experience at house of linn is so good - demonstrations last for hours....
A tube phono stage with regulated tube power supply, for that extra bit of silkiness, the Icon Audio PS3.

also more prominent. But there was something missing: with the mid-high dominating the scene the sound was very aural and there was much less low. The sound had become harsh, it lacked musicality, a certain fluidness.

So, I was left with very mixed feelings: I was happy with the better detail but the sound had gone. I decided to revert to my old Eagle cable, perhaps it being so thick took care of a good tight bass reproduction? But before I did this I decided to try a weird experiment: I put the bridges back but I left the bi-wire Inakustik assembly in place (basically this is single wire with double cross section). Much to my astonishment (and contentment I must say) I got everything back. The tight strong bass, the pleasant fluid musicality and I kept the increased cleanliness and detail in the mid-high.

So what was the conclusion here? The improved sound quality is brought along by using a better loudspeaker cable indeed, but bi-wiring has only an adverse effect? Or is this just a peculiarity of my system? The answer actually lies in the sheer thickness of the cable: putting back the bridges physically doubles the available cross section for both bi-wire terminals.

Adnantant to apply proper bi-wiring to my system I choose to add a separate Inakustik Black and White Referenz LS 502 (same cable as LS 1002 but single) for the mid-high section and use the full width of the LS1002 for the low section. At the amplifier terminals I had to apply sturdy WBT plugs in order to securely combine the three cable ends in one terminal.

The result is okay now. I have a sound that is detailed and balanced and listening to older albums I hear so much detail that they sound different to me, not in an unpleasant way, more like an adventure: as if I hear for the first time the instruments separated.

So: cables matter and bi-wiring with a better cable changed my system sound quality very audibly, notwithstanding what high end skeptics may claim.

My hi-fi set can be viewed at http://www.myhifiworld.co.uk/index.php?user=13835. One of the thumbnails shows the bi-wiring on the loudspeaker.

Met vriendelijke groet,
Rudy Deblieck
Ogglabbeek.

Thanks for your experiences Rudy. Yes, cables do make a difference and it is always interesting to hear others say so, since nothing can be proved. I always use Van den Hul carbon sheathed cables as they are very smooth sounding and cohesive, but others find them too laid back. It's very much horses for courses. NK

ANALOGUE FOR ALL!
If we want to push analogue then I'd suggest we go back to when BBC Radio One had their Radio One Roadshow, when the then radio celebrities were followed in a sense as idols or icons. How about using the technique to allow people to listen to how audio can sound, having a roadshow with known celebrities that own real audio, doing audio gigs as do musicians and bands etc. I'm sure very many more people would follow true audio knowing a celebrity has the stuff. The Radio One road show had a large lorry or van, went to places like Brighton, W-S-M, Liverpool, Manchester, etc. The Radio One Roadshow was a success traveling the country selling the music and the celebrities etc. With a concerted effort and obviously some one to do it, then CD and vinyl may have a chance in the future.

Reading the Collins - English Dictionary it shows digital as any number between / and 9, etc, the dictionary shows analogue as an object or something to measure an object. So what is an object? A statue, a vase, a dustbin, an atom! If then analogue represents an object, then analogue is everything that exists and digital is only the number of things that exist! So therefore everything is analogue! From the largest object to the smallest. In mathematics then, zero is absolute! and 1 to 9 etc are only theatrical unless there is energy or mass, so digital doesn't exist unless we have energy and mass.

The marketing of digital is extremely clever but maybe now over the top, so therefore as analogue is everything that exists why don't we advertise it so, certainly more than we do. Digital is fictitious unless we have analogue, it's as simple as that. Let's start realising that digital and computers are just another tool in our armoury. Many thanks for a fine magazine.

J.S. Ridsdill,
Somerset

Jeremy, I love the thought of 'theatrical' numbers as you put, perhaps doing a stage show for us? But I know what you mean. The funny thing about digital is - it isn't! All signals are analogue, including digital ones, so digital is analogue in any case. In truth it is digital code on an analogue signal. This is somewhat hypothetical until you reach the problem of high date rate digital signals being transmitted down a cable. Then the analogue bandwidth of the cable must be sufficient to support the analogue bandwidth required by the digital signal - if you see what I mean! This was for a long time a problem with computer cables; data rates increased but the cables were not able to support them - result, computer crash. Parallel cables were worse
Sony TC765 open reel tape recorder
- a blast from our analogue past.

MAIL

OLD FRIEND
I have only fairly recently begun to buy and become a fan of ‘Hi-Fi World’. What a gem of a magazine it is! I am specially delighted with the articles on "vintage hi-fi" to complement the advertisements for these items. I noticed in one issue an advertisement for "Hi-Fi Yearbooks" - (& Hi-Fi Lovers Bible). I myself have tried (in vain) to purchase old copies of these. Would it be possible to have a special edition published to feature the best of those over several years - specially as lots of your readers are into vintage hi-fi.

Finally, having read your superb article on Reel-To-Reel tape recorders - what about a Reel! golden olde article about Battery Portable machines. I have two UHER 4000s but sadly I don’t know of anyone who can repair one. Is there someone out there who can?

Roger Marsden
Sheffield

on "vintage hi-fi" to complement the advertisements for these items. I noticed in one issue an advertisement for “Hi-Fi Yearbooks” - (& Hi-Fi Lovers Bible). I myself have tried (in vain) to purchase old copies of these. Would it be possible to have a special edition published to feature the best of those over several years - specially as lots of your readers are into vintage hi-fi.

Finally, having read your superb article on Reel-To-Reel tape recorders - what about a Reel! golden olde article about Battery Portable machines. I have two UHER 4000s but sadly I don’t know of anyone who can repair one. Is there someone out there who can?

Roger Marsden
Sheffield

Sony TC765 open reel tape recorder - a blast from our analogue past.

than serial, because serial can be more easily constructed to possess very high analogue bandwidth and thus support very high digital data rates. That’s why modern computer interconnects are simple little things.

Hi-FI WORLD SEPTEMBER 2009 www.hi-fiworld.co.uk

END OF LESSON. Theatrical digits are far more entertaining methinks!

I am sure the industry would do roadshows, if it had the BBC’s budgets. I read that the license fee brings in £4bn per annum.

Thank you for your letter on the Empire Troubadour Record Deck. I dare say one will turn up and I look forward in anticipation to you obtaining one, to see how good it really was (by the standards then.)

I would like to thank you for publishing my letter on the Empire Troubadour Record Deck. I dare say one will turn up and I look forward in anticipation to you obtaining one, to see how good it really was (by the standards then.)

Thanks once again, it was very Scottish of you. The highest Accolade I can award.

best regards
Billy Gunn of Scotland

SCREEN PIONEERS
My thanks to Raymond Hodge for asking, and yourselves for answering, the question regarding what cartridges are suitable for the PL-707 turntable (May 2007). On the subject of modifications I must admit to be reluctant to attempt any substantial alterations. Replacement of the mains cable, removing the Perspex cover when playing and placing on an MDF board supported by Focalpods is all that I have been prepared to do. When I bought the turntable in 1985 I remember being surprised to see that the phono plugs had been gold plated. More recently the correspondence concerning tone arm design in Hi-Fi World has reinforced my suspicion that the turntable was a well developed, sophisticated design, best left alone by me. The weakest link I suspect is the PC-6MC cartridge which has the unusual MC design feature of a renewable stylus. After deciding to write I thought it might be informative to compare the sound of the PL707/PC-6MCProject phono SE against my CD player using Sennheiser 650 headphones and Creek OBH 215E. I think the Cambridge Azur 404C is very good but with a clean stylus the PL707 was clearly better with my 70’s Prog Rock - more dynamic, sharper transients and superior 3-D soundstage. Does NK have any opinion regarding Pioneer’s idea of using the ‘Dynamic Resonance Absorber’ in the graphite composite arm?

Robert Smerdon
Devon P.S.
The fact that it uses a graphite composite material suggests it will differ to many arms and may well be very good. Dynamic absorbers usually attempted to suppress the arm / cartridge resonance, not arm tube resonances. Irrespective, Pioneer made some good turntables many moons ago and you PL707 seems to be one of them. NK

MICHEL SHOCK
Thank you for the past advice on my Michel TechnoDec. I had every intention of upgrading to a Gyro at the Bristol Show but was seduced by the sound of the Naim XS amplifier and bought one so had to content myself with a Technoarm A still partnered by the Ortofon Blue with the addition of a Cambridge P640p phono stage. I will eventually change the cartridge to an Ortofon Black and will probably have maximised the potential of the
Hi John - first up, I think you should still go for a GyroDec SE when you reasonably can. There's not a huge price difference (and you'd get a good price for your Technodec second-hand), but the Gyro really pushes ahead in almost every way (providing it's set-up correctly). This, plus the TechnoArm, plus your existing Ortofon Blue, would fit the bill nicely - and you can upgrade the cartridge when the stylus finally wears out, so you've got good value from it. As for the CD, your DAC is excellent, and I'd do the speaker upgrade last than the Eastern Electric MiniMax transport, which is a fair way better than the Eastern Electric MiniMax's CD, your DAC is excellent, and you've got good value from it. As for when the stylus finally wears out, so Ortofon Blue, would fit the bill nicely plus the TechnoArm, plus your existing for a good price. However, those of us who just want to enjoy the experience, and maybe are unable to read music, hope to hear something different so there should be no room for disagreements.

Yours faithfully,
R. Mark Hodgson
Bromyard Home

Hi David. I have had the same problem is the Gulf of difference in sound between my vinyl and CD collection. I have a large CD collection which currently plays through an Eastern Electric Minimax player and Musical Fidelity Tri Vista DAC. A smooth sound without the excitement and dynamics of Vinyl. Many of my CDs are quite rare jazz issues and I would like to enjoy these to the full. I enjoy the Tri Vista DAC and the Minimax always sounds better when it is a part of the system. Would a Cyrus CD Xt SE transport be worth considering?

My final query is regarding my stand mounted Dynaudio 1.3 speakers. For some time I have thought that floorstanders would make a huge improvement but would want something of the same quality as the Dynaudio. Loudspeaker leads are Sonic Link $300, interconnects are a mixture of good mid price choice from Chord, Sonic Link with Nordost Blue Heaven connecting the DAC to the amplifier. Room size is approximately 7 meters by 3.25 meters.

John Belcher
Bristol North, Somerset

Got a Michell TecnoDec? Then get a GyroDec SE, says David!

Technodec by this time. What do you think?

My current problem is the Gulf of difference in sound between my vinyl and CD collection. I have a large CD collection which currently plays through an Eastern Electric Minimax player and Musical Fidelity Tri Vista DAC. A smooth sound without the excitement and dynamics of Vinyl. Many of my CDs are quite rare jazz issues and I would like to enjoy these to the full. I enjoy the Tri Vista DAC and the Minimax always sounds better when it is a part of the system. Would a Cyrus CD Xt SE transport be worth considering?

My final query is regarding my stand mounted Dynaudio 1.3 speakers. For some time I have thought that floorstanders would make a huge improvement but would want something of the same quality as the Dynaudio. Loudspeaker leads are Sonic Link $300, interconnects are a mixture of good mid price choice from Chord, Sonic Link with Nordost Blue Heaven connecting the DAC to the amplifier. Room size is approximately 7 meters by 3.25 meters.

John Belcher
Bristol North, Somerset

CLASSICAL SCORE
Having known a few classical musicians, I gather that they often follow the performance with a score, or if a detail is unclear or even inaudible because of poor recording or reproduction they compensate automatically. Those who are record collectors frequently concentrate on their own instruments and have an interest in matters of performance style, which is usually discernible even in very old and poorly reproduced recordings. However, those of us who just want to enjoy the experience, and maybe are unable to read music, hope to hear something approaching the fidelity of a live concert, which is why we are willing to spend sometimes inordinate amounts of money on records (of all kinds) and equipment. The expectations are quite different so there should be no room for disagreements.

Yours faithfully,
R. Mark Hodgson
Bromyard Home

DUST BUSTER
I have had many dusty things happening in my house recently. I have around 500 hundred bits of vinyl in the house, both singles and albums. I would imagine with all the dust kicking about the house and the vast amount of vinyl kicking around very cheaply from charity shops, also most likely dusty, it might be an idea to invest in a proper piece of kit for cleaning vinyl.

I note that you covered the Keith Mans' machines, but, in terms of pricing, this could be beyond a lot of your readers. There does seem to be a few cheaper alternatives available (Okki Nokki, Mod, VPI) I was wondering if any of these (I am thinking about the law of diminishing returns) can provide 80 - 90% of the performance at half the price. I feel pretty sure that my missus would be none too happy if I spent two grand on a record cleaning machine. Any advice?

Ewan Scott
Project Engineer,
Aberdeenshire

Well Ewan, you're in luck. Let me direct you to the July 2009 issue of HI-FI World and my review of the Moth Mk.II Pro on p.103 which should do the job nicely for around £450. This solid, neat – if rather noisy – record cleaner will go much further than removing the dust from your vinyl, although it does that very well. It will reach down into those dark grooves and wrench out the gunk and muck that loves to collect there, improving the overall sound quality of your records. Even brand new records will benefit from a session with the Moth. One thing, though, if/when you buy the Moth, they'll probably try and foist their own cleaning liquid at you. It's a decent recipe but I much prefer the alcohol free L'Art Du Son (try www.audiostimation.co.uk) which is much kinder to vinyl and, in my opinion, is more effective.

PR

TOP CUT
I greatly enjoyed (and agreed with) the robust responses from NK and DP to the Daily Telegraph's reviewer's letter! Are Salisbury and Cambridge not in deepest Telegraph country?

I have been investigating USB and S/PDIF outputs from a PC running Windows XP to a Quad CDP99II as a digital 'pre-amp', to Cambridge Audio Dacmagic and Terratec Phase 26 DACs. The S/PDIF is via the PC internal '192 kHz' sound card. I find I am unable to get data outputs above 48kHz and using Foobar 2000 and Winamp players I get no output at all from 96kHz files. Cambridge Audio suggest that this is a limitation imposed by the USB, but I would think this need not apply to the S/PDIF output. Is this a genuine hardware limitation or is Bill Gates keeping us to the DVD/BD 48 kHz / 16 bit digital output limitation to keep in with Hollywood? (a naughty suggestion, but one wonders...)

David Land
Glasgow

Hi David. I have had the same problem using free Audacity editor software. It can be set to produce a 96kHz sample rate file but measurement shows an upper frequency limit of 24kHz is being imposed, so the data stream is being down sampled to 48kHz somewhere in my PC. I suspect the sound card at present. The reason I am told, is to ensure perceived compatibility: that is, when the data stream is sent to external converters it will play, because most handle 48kHz, but few 96kHz. Readers with experience in Sound Cards (I'm a little rusty here!) may like to throw some light on the issue.

NK
WDKEL84 Valve Amplifier Kit

"The quality that can be gleaned from this amp is a fine introduction to the joys of the valve sound"

The WDKEL84 features a pair of EL84 valves in Push Pull configuration per channel, providing two channels each 18 Watts into an 8 Ohm load. Available as a 5 input integrated amplifier with ALPS volume control.

WDKEL84 kit £499
WDKEL84 built and tested £649

WD88VA Valve Amplifier Kit

"The result is an amplifier that combines majesty, transparency and rhythmic boogie factor with the ability to swing and sing on all types of music"

Often described as a 'sweet sounding' valve, our particular implementation of the KT88 makes sure that it is driven to its ultimate performance. Available as a 35W stereo power amplifier with single input volume control, or as a relay switched integrated with five inputs.

WD88VA kit £989
WD88VA built and tested £1289

WDHD3S Headphone Valve Amplifier Kit

"WDHD3S is a single-ended design with the power pentode wired up in triode configuration for added purity and is as quiet as a mouse"

A beautifully simple stereo headphone amplifier design using Mullard ECL83 valves. It works directly from any source. The circuit uses twin high specification E/I output transformers that can be switched to drive any headphones between 16 to 300 Ohms.

WDHD3S kit £398
WDHD3S built and tested £528

WD25A Standmount Speaker Kit

"The one aspect that stands out is the easy ability to resolve instruments and voices ... bass quality and definition is a revelation"

The aperiodic enclosure offers the bass clarity and definition of a larger closed box, together with the efficiency and easy amplifier load necessary for users of valve amplifiers. Available with SEAS STD soft dome treble unit, or high performance SEAS Millenium treble unit.

WD25A STD kit (pair) £269
WD25A EX kit (pair) £699

WD25T Floorstanding Speaker Kit

"The WD25T always sounds crisp and taut, but can 'rumble' menacingly giving impressive physicality reminiscent of far larger boxes. Imaging is superb, the midband is also special; it's very open with masses of detail about the condition of the recording"

Cunningly arranged as an aperiodic enclosure leading to a lower sealed compartment, the WD25T combines the optimum damping of aperiodic loading with the bass extension of a large closed box. Available with STD soft dome or high performance Excel treble units.

Both the WD25 kits are based around a SEAS 26cm (10") paper cone bass unit with an efficiency of 89dB for 1W. The crossover has been developed for an easy drive 6 - 8 Ohm load making the system ideal for all types of amplifiers.

WD25Tv2 STD kit (pair) £329
WD25Tv2 XL kit (pair) £499

All our kits are complete with pictorial easy-to-follow instructions.
All parts are included - all you need is a screwdriver and soldering iron.

www.world-designs.co.uk
Tel: 01832 293320
Satellites and subwoofer systems aimed at the home audio market usually get a sceptical reception from us; we rejected a Teufel system as unsuitable for the magazine recently, for example. But Cabasse were brave enough to travel from France all the way to Bristol in the depths of last winter to show off their satellite and subwoofer combo and Cabasse’s PR man implored me to take a listen.

Forever being open minded(!), I did just that and thought they did sound very nice and tidy. I was followed by many Hi-Fi Worlders and everyone agreed - so here’s our take on the Cabasse i02 satellite and subwoofer system. It may not suit hardcore audiophiles, but it did have some unusual strengths.

Now to me the i02 looks like a glimpse of the future from somewhere back in the late 1960s. Hovering spheres atop vertical wooden columns supported by a circular base plate aren’t quite ‘today’, and if little green men jumped out then I would suddenly see the joke. But they didn’t whilst I was reviewing the i02s, the only time they lost contact with terra firma being when a visitor nearly knocked one over, because they are top heavy. The satellite loudspeaker on its stand (£900 each - ouch!) is 112cms (3ft 8in) high but weighs a comparatively light 15kgs (33lbs). The Santorin 25 subwoofer (£800) however, weighs a substantial 19kgs (42lbs) and has a 250 Watt amplifier inside.

The i02 system can be connected up to any normal hi-fi amplifier. Both left and right loudspeaker leads go from amplifier to the subwoofer. Another pair of leads are then connected between the subwoofer and each satellite. The subwoofer is best sited at centre between the satellites, or as Cabasse show it in their handbook, to one or other side. The subwoofer amplifies bass only (200Hz downward) combining the channels to give mono bass from a single, downward firing, high power bass unit. The output to each satellite is full range (200Hz upward), the signal passing through the subwoofer unfiltered (i.e. there is no high pass filter). Each satellite has an input blocking capacitor that helps filter out all bass.

Within each sphere lies a midrange unit and, on a pillar, a treble unit, so the satellites are effectively point sources. The subwoofer has rotary controls to set level and cut off frequency. I have always found these devilishly difficult to set properly without a measuring microphone and spectrum analyser and see no reason for the frequency control in this design. The level control could have a calibrated detent too, as it is possible to level match satellites with subwoofer in a proprietary system such as this.

Cabasse need to put a little more effort into this so the customer isn’t left to twiddle in an ad hoc manner to get a decent result. The settings I used were 9 o’clock on Gain and highest frequency (fully

A retrospective vision of the future, or a special sounding satellite and subwoofer combination? Noel Keywood enters the Space Race with Cabasse’s i02 speaker system...
AcoUSTic ART
REAL-TIME ANALOGUE ROOM TREATMENT

Synergistic Research Acoustic ART - Analogue Room Treatment System

ABC Audio
Tel: 07842 126218 | Fax: 020 8462 6955 | info@abc-audio.co.uk

"The plus series - affordable factory upgrades that deliver so much more..."
See and hear us at the National Audio Show '09, 26 - 27 September 2009. Room: Syndicate 12.
SOUND QUALITY

Why we all liked these loudspeakers at the Bristol Show became obvious when listening to them. Two properties were striking: they have fabulous imaging and they also have high standards. But you have to balance its obvious strengths against its equally evident weaknesses, and its high price. Whilst plucked acoustic bass in 'Fever' sounded fine, electric bass in Loreena McKennitt's 'Gates of Istanbul' was woody; what I got was very recording dependent and both the subwoofer in itself, and its poor integration hold the system back. In contrast, the satellites were lovely to listen to and quite unique in what they could achieve.

The i02 system from Cabasse has some knock-out strengths, but also weaknesses, and pricing that is out of kilter with the market generally. If this and subwoofer bass doesn't concern you then the i02 system will otherwise produce a sound stage more impressive than most hi-fi loudspeakers.

MEASURED PERFORMANCE

Our frequency response analysis of the i02 shows the composite response of satellite and subwoofer in green and satellite alone in orange. This makes obvious straight away that the powered subwoofer is doing a lot of work. It gives smooth output from 200Hz all the way down to 25Hz - extraordinarily low. This is the sort of performance expected from a giant Tannoy or powered Heredale Diamonds. Similarly, these spheres stand out, setting up one of the best defined and most open of sound stages I have encountered for a long time. There's an explanation: absence of bodywork eliminates surface wave interference. As always though there is a price to pay: small volume may mean great imaging but also means no bass, and this proved to be the system's Achilles Heal. The subwoofer did not integrate in well, producing heavy, undifferentiated bass that did not euphonically match what the satellites were doing; it was neither spry nor informative. I loved the sound of the satellites but have heard better subwoofers. And since most powered subwoofers reach 100Hz, not 200Hz of this one, alternatives are not available.

In spite of its mediocre subwoofer, the Cabasse's i02 sub/satellite system still has properties that astounded me by hi-fi standards. But you have to balance its obvious strengths against its equally evident weaknesses, and its high price. Whilst plucked acoustic bass in 'Fever' sounded fine, electric bass in Loreena McKennitt's 'Gates of Istanbul' was woody; what I got was very recording dependent and both the subwoofer in itself, and its poor integration hold the system back. In contrast, the satellites were lovely to listen to and quite unique in what they could achieve.

The i02 system from Cabasse has some knock-out strengths, but also weaknesses, and pricing that is out of kilter with the market generally. If this and subwoofer bass doesn't concern you then the i02 system will otherwise produce a sound stage more impressive than most hi-fi loudspeakers.

VERDICT

Satellites that disappear, leaving only a wide open sound stage with fabulous dynamics. Mediocre subwoofer bass through.

Cabasse i02 £2,600

Cabasse +33 (0) 98 05 88 88
www.cabasse.com

FOR

- superb sound stage
- lively midband dynamics
- insightful

AGAINST

- mediocre subwoofer
- limited bass level
- top heavy satellites
The Verve

Cambridge Audio's new 650A Integrated amplifier is a back-to-basics, no-frills product with some of its predecessor's spurious circuitry taken out. Paul Rigby is the lucky man who gets to hear it first...

You know, it's not just teenagers who have 'issues'. Even decrepit hi-fi reviewers get the odd bee in their bonnets. Mine surrounds the issue of simplicity. It's dangerous to generalise but there are times, within life, when simplicity is absolutely essential: producing a fine plate of food (to let nature's own flavours flood out); scoring a goal (through ball via Kenny Dalglish, picked up by Rush... bam!) and producing a serious piece of hi-fi hardware.

Of late, I have felt that Cambridge Audio just haven't 'got' simplicity. Reviewing the 740A within the May 2009 amplifier group test, I had a problem with the fussy interface. In this issue's DAC special, my problem with the company's DacMagic surrounded the inclusion of a useless set of filters. Too many cooks...

However, after talking to Matthew Bramble, project leader for the design of the 650A, I was pleasantly surprised. When discussing the differences between the 640A amplifier and the 650A, when he declared that, "one of the most obvious differences was that we took out the A-Bus circuit, the multi-room circuit (used to connect control keyboards and the like) out of the 650A. We did a bit of market research. We found that most of our customers at this price point weren't using this output at all. If they were going to go to the trouble of installing multi-room in their house they would install the full system. Removing this A-Bus reduced costs and freed up board space. This meant that we could now afford to spend the savings elsewhere."

Hurrah! Maybe Cambridge have finally got the point after all? To be able to take a vox pop of the public's wishes says a lot about how this amplifier was created in the first place and sets it apart from other competing designs which are produced almost to a yearly rota within specific targets. The 650A, measuring 120x430x350mm, took two and a half years to come to fruition. The majority of that time was taken up tossing ideas from one designer to another (there are always several people on the design team), trying new angles and pitching new variations on accepted practices. For example, as Bramble explained, "...rearranging the speaker terminals on the back to get better crosstalk at high frequency. We tested that and it worked so we included it."

Often, when you work from scratch, you're working with the unknown. With the 650A, Bramble and the other Cambridge designers were able to go back and tweak and improve. So, in effect, the life of the 640A was a form of extended testing period for the 650A.

Despite the slow evolution of the upgrade from 640A to 650A, the changes have mounted up to produce a series of improvements that look impressive on paper. For example, with the money saved in dumping...
the multi-room circuitry, Bramble was able to upgrade the volume pots. "In the past, we'd used carbon film volume pots at a price that we could afford then. Now we can use the ALPS black box plastic film pots which produce much better channel balance, and it feels much nicer too."

In addition to the better pots, all the internal boards have been re-laid (the layout of a circuit board can be as important as the actual surface components themselves). There are also some improvements in the actual circuitry however, such as the preamp section.

The protection circuitry, CAPS (Cambridge Audio Protection), was also tuned. Its aim is to measure in real time, the current in the output stage, the voltage across it and so on. If it sees something it doesn't like it'll triggen. The 640A incarnation of the CAP5 circuit was conservatively made. However, "With the 650A, we now allow a greater amount of current as long as it's only for short bursts," explained Bramble. "This helps to produces a more dynamic performance without affecting the measured power at all. Other features include a single, larger transformer with a bigger heatsink and more power but separate transformer taps for left and right channels to give a dual-mono design in an attempt to isolate the signals."

Bramble was pointed in his comment that a phono amp has not come up to scratch, either. Similarly, Cambridge resisted adopting Class D amplification because the company doesn't believe that the technology has reached a high enough standard to be beneficial to anything but top-of-the-line amplifiers. In Bramble's words, budget interpretations of the technology, "have not really cut the mustard."

The 650A has been an extended project and each designer has considered each feature carefully. Yet Bramble gets a real kick out of the amp's aesthetics. "It looks more expensive than it really is and we haven't actually spent lots of money on this area. If you look at the knobs, it's not as strange as it might appear, as a top flight reference system will soon search out another amplifier's best (and worst) qualities. In initially tackling the vinyl source, and Kate Bush's album, 'Aerial (EMI), it was immediately apparent, playing the track, that the 650A sounded very different. It's an obvious observation to make but the spry solid-state sound of the 650A removed most traces of the organic realism that valves present to the ear. The skin of a drum, the wood of a drumstick, the metal of a guitar string."

Yet whilst important, they are still nuances and it was to the 650A's credit that the basic, essential information of the track was present and surprisingly correct. Instruments didn't suddenly hide when the 650A was plugged into the reference system. Treble, via cymbals, was good, whilst the midrange provided all the detail you could require to get the flavour and atmosphere of one of Kate's most eccentric of songs. However, it was both the lower midrange and bass that really stood out for me, as the acoustic guitar had tremendous grip when strings were plucked and the bass wielded a heck of a punch.

"Its appeal lies in the fact that it gets the basics very right, whilst covering its tracks well so its foibles don't offend..."
SPECIAL INTRODUCTORY OFFER!!!!

HI-FI WORLD ELECTRONIC EDITION

VISIT OUR WEBSITE: www.hi-fiworld.co.uk

Queries to - esubs@hi-fiworld.co.uk

Subscribe to our eco-friendly e-edition of Hi-Fi World and receive a 50% discount!!!

- Receive your issue a week before on-sale dates.
- Be the first to grab a bargain in our Free Reader Classified Ads.
- In-house lab. tests to AES and IEC standards
- Run by dedicated hi-fi engineers & enthusiasts.
- No missed issues, or postal delays.
- Access your issues from anywhere in the World.
- PC and Mac friendly.
- Eco-friendly.

Subscribe today and receive 12 issues for £20 - that's an amazing £1.90 per issue!

check out our free trial issue

VISIT OUR WEBSITE: www.hi-fiworld.co.uk and select "ELECTRONIC EDITION"

To purchase your e-edition click here

Pay in Sterling, US Dollars or Euros. Non-sterling prices vary according to exchange rate.

Cards accepted: Visa, Maestro (Switch), Mastercard, Solo and Delta.
was further highlighted with the vinyl version of Yes' 'The Yes Album' (Atlantic) and the track, 'Yours Is No Disgrace'. If anything, the 650A created more energy and generated a greater degree of musicality with a rock beat. Again, acoustic guitar strumming offered a dynamic attack, bass guitar was big, bold and throaty, whilst the drums were large, heavy and commanding.

One note of caution however, for both Kate Bush and Yes, was the well lit - if not bright - nature of the presentation. It would be wise to carefully dem the 650A with complimentary speakers to balance this aspect of the sound, which is certainly big and bold with a solid stereo image and a wide soundstage.

It was at this point, just before I transferred from the vinyl source to my CD player, that the 650A decided to go on strike. The fault was in no way due to the amplifier, 'twas mine own! I had neglected to realise that budget amps have no business driving big old electrostatic speakers. How in fact, the 650A survived for so long without complaining, is surprising.

However, it was at this point that I was thrown out of the towel. But whilst other budget amps may have died a death, the 650A was saved by its built-in CAPS protection system which prevented any damage and flashed a coded message on the fascia (which was decoded via the manual). To solve the case, all I had to do was unplug the Quads from my system and the 650A woke up again.

Once the Cyrus/Benchmark CD source was hooked up, the lively nature of the 650A hit me in the face via the Sugababes' 'Stronger' track from the album, 'Angels With Dirty Faces' (Island) as the excessive peak limiting resulted in both a relatively harsh vocal presentation and obvious, damaged upper register tones. Through it all however, the track offered both drive and punch from the lower registers that resulted in this reviewer doing a spot of animated foot-tapping.

Playing Carol Kidd's 'A Nightingale Sang In Berkeley Square' from 'Dreamsville' (Linn) confirmed that this amplifier is no jazz lover. The double bass player sounded like he'd been drafted in from AC/DC, the piano took a back seat and the bass power demolished any sense of tonal delicacy. Saying that, Kidd's vocal performance was fruity and wonderfully throaty, and the acoustic guitar was both precise and dynamic. Indeed, considering this amplifier's very modest ticket price, it did manage all this really rather well.

**CONCLUSION**

The new Cambridge Audio 650A integrated is anything but shy, as a performer and as an artefact. I loved its retro styling with the slab-like brushed aluminium fascia, the centrally positioned large volume knob and buttons a go-go. This all reminded me of the nineteen seventies guitar heroes with their long hair, unwashed jeans, spontaneously combusting drummers and loud, powerful, woof er wobbling bass. In a sense this is what this amplifier is too, as it loves powerful, propulsive music and isn't afraid of saying so. It's not the last word in refinement, tonal colour or subtlety of course, but I was surprised just how much fun it sounded after going back to back with my very expensive high end valve system. Its appeal lies in the fact that it gets the basics very right, whilst it covers its tracks well so its foibles don't offend. This can't be said of many such entry-level amplifiers.

**MEASURED PERFORMANCE**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>78 watts</td>
</tr>
<tr>
<td>CD/tuner/aux.</td>
<td></td>
</tr>
<tr>
<td>Frequency response</td>
<td>7Hz-180kHz</td>
</tr>
<tr>
<td>Separation</td>
<td>95dB</td>
</tr>
<tr>
<td>Noise</td>
<td>-110dB</td>
</tr>
<tr>
<td>Distortion</td>
<td>0.003%</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>370mV</td>
</tr>
<tr>
<td>Damping factor</td>
<td>60</td>
</tr>
</tbody>
</table>

**VERDICT**

Full of energy but with finesse too, this is an excellent budget integrated.

**CAMBRIDGE AUDIO 650A**

£350

Cambridge Audio 650A is an excellent budget integrated.

**REFERENCES**

- www.cambridgeaudio.com
- www.hi-fiworld.co.uk

**REFERENCE SYSTEM**

Avid Acusit/SME IV/Benz Glider cartridge
Icon PS3 phono stage
Aesthetix Calypso preamplifier
Icon MB845 monoblocks
Cyrus CD-Xt SE CD transport
Benchmark DAC-1S DAC
Quad ESL-57 (One Thing modified) speakers
Acoustic Reference Radiance One speakers

**REFERENCE SYSTEM**

Avid Acusit/SME IV/Benz Glider cartridge
Icon PS3 phono stage
Aesthetix Calypso preamplifier
Icon MB845 monoblocks
Cyrus CD-Xt SE CD transport
Benchmark DAC-1S DAC
Quad ESL-57 (One Thing modified) speakers
Acoustic Reference Radiance One speakers

**REFERENCE SYSTEM**

Avid Acusit/SME IV/Benz Glider cartridge
Icon PS3 phono stage
Aesthetix Calypso preamplifier
Icon MB845 monoblocks
Cyrus CD-Xt SE CD transport
Benchmark DAC-1S DAC
Quad ESL-57 (One Thing modified) speakers
Acoustic Reference Radiance One speakers
Trew Romance

Astin Trew, Astin Trew & Spendor. No, not a new firm of solicitors, but a dreamboat of a CD system if you're into powerful, beat driven music, says a doting Paul Rigby...

In business, in life or in sport, there comes a time when the heady achievements of the first team begin to dull and recede into a nostalgia-coated past. When the youngsters have filled their heads with knowledge and starry-eyed ambition, sufficient to step into the breach and assume the position of responsibility, they become the dominant figures. And so it goes with successful hi-fi equipment...

With this intriguingly posited system, consisting of the Astin Trew AT3500plus CD player, Astin Trew AT2000plus amplifier and the Spendor A5 floorstanding speakers, we have a suite of hardware which has just supplanted its older relations; the Astin Trew AT3500 CD player, Astin Trew AT2000 amplifier and the Spendor S5e floorstanding speakers. Each upgrade has been carefully considered. None are what you might call radical. So why change dramatically, why start from scratch? This is a system, or a team, with a winning mentality. And you know what they say about winning teams.

That is not to assume that the changes imposed upon each box are minor or are to be viewed as a selection of spurious tweaks. Oh no, this is a system where each box has evolved into a new and wholly superior form from its previous incarnation. Taking the source as our first example, yes the casing for the Astin Trew AT3500plus CD player remains the same. The front of the AT3500plus still retains its simple and spartan selection of basic functions with a poor, cramped display plus a similarly basic yet practical rear port selection on the rear. The heart of the system is a Philips CD12 mechanism while the associated DAC is a Burr Brown PCM1738. Yet, the improvements are all internal, featuring dampers on all of its integrated circuits on the DAC, bonding them with thermal glue plus upgrades to the internal cabling. The AT3500plus also includes an upgraded Philips JAN (Joint Army Navy) new, old stock buffer valve to replace the Electro Harmonix ECB8.

The AT2000plus fascia and rear is similarly familiar, and are rather busier than its CD cousin, mainly because it has aspirations to be a part of a multi-room audio and/or AV...
unit. Hence, the frontal power amp input allows you to switch from the line level sources to a TV for AV use. This allows your AT2000plus to be part of a 5.1 set-up controlling just the front two channels or, alternatively, a stereo system for the TV. Similarly, a balanced input is present on the rear which will also support a multi-room system option along with Cat5 outputs to allow you to have a second AT2000 in another room. A data connection for RS232 and infrared control signals is also supplied on the rear.

The Class A-biased preamplifier on the AT2000 has a power supply that is based on the latest Mk.2 variant of the Never Connected power supply. Other standard features include a buffer valve that controls the quiescent current to the MOSFET providing a more stable supply and, hopefully, a sweeter sound from those 65 Watts per side.

Again, the enhancements to the amplifier are internal and include the same internal wiring changes as that applied to the AT3500plus that improves the purity of the installed copper cable, a set of silicon dampers on the buffer valve and capacitor upgrades to top-of-the-line Auricaps.

Moving to the final link in the aural chain, the two-and-a-half-way, single-wired, Spendor A5 floorstanders feature a linear flow reflex port system with a cabinet that includes reduced physical internal damping, to diminish low frequency interference but an increase in the rigidity of the dampers themselves to aid the speed of the sound and reduce possible timing issues. The A5s feature a new SEAS-sourced, 22mm wide surround tweeter with a fabric dome that, says the company, was chosen for its enhanced transparency characteristics.

Similarly, the mid/bass unit created by Spendor is a 15cm driver with a new motor system and coil. The cone material is the same as the SSe — EP38 or Engineering Polymer 38. The driver features a crossover that is designed to attenuate the switch from driver to driver, allowing the midrange portion to reach high into the treble areas and the bass part to step down well into the woofer range in an attempt to provide a smooth transfer outside the sensitive 'presence' band. The unit features a bullet-shaped phase plug in the centre, a phase control device that is said to prevent nasty peaks and dips. The woofer, also created by Spendor, was designed to add punch and depth and is optimised to operate at low frequencies, being tuned to take the load over the low frequency range. Instead of the phase correction cone, it only features a concave dome which helps to make it more rigid. Notably, the bottom of the cabinet features four machined steel stabiliser inserts, fixed rigidly into the cabinet, to take the spikes, that prevents any 'give' and 'play', minimising ambient disturbance.

"this is a system that will enchant the rock fan, and give the electronica enthusiast palpitations!"

SOUND QUALITY
The system as a whole got off to a great start, even before I began my official testing. I tend to play any old CD when tweaking speaker positioning and the like but quickly became entranced by a 1981 mastering of Kraftwerk's 'Computer World' (EMI) when, in mid-tweak, found myself floating to my listening position. I was half way through the album when I came to my senses. This system just adores analogue synths, and I was struck by the musicality and fluidity of the performance. In fact, the vibrancy and enthusiasm generated by the masterly 'Numbers' had me upping the volume, and again, and then some more, such was the clarity of the
Jordan Acoustics

freephone: 0800 121 4771 or 72

e-mail: ask@jordanacoustics.co.uk

Jinro Amp: £15,300
10% Deposit: £1,530.00
Term: 36 months
Monthly Payment: £382.50

Meishu Silver Amp: £6,300
10% Deposit: £630.00
Term: 36 months
Monthly Payment: £175.00

CD4.1x CD Player: £6,840
10% Deposit: £684.00
Term: 36 months
Monthly Payment: £171.00

*subject to status/conditions
*written details on request
*buy now pay later 0% finance available on most products.

Generations of music lovers have enjoyed the sheer magic of Audio Note products and now Jordan Acoustics customers can as well...

Music's Finest Conductors
Using the best available technology and the finest components, Audio Note reproduces music in a way that very few products can match at any level.

Audio Note Family
For the analogue lover there is a choice of beautiful cartridges, tonearms and turntables. For those looking for a digital source solution, you can choose between integrated or separate transport/dac. Each has astonishing detail and transparency.
The heart of any system is the amplifier and you'll find a heart here that seriously glows. Low powered valve amplification at its very finest!

Audio Note Family

Exclusive Tannoy factory visit for all new Tannoy Prestige customers**

One of the oldest and most prestigious brands in the world...

Tannoy Prestige loudspeakers have certainly always been out of the ordinary, wonderfully individual and totally unlike any other speakers. Distinctive, distinguished and proud, they transcend mere fashion and have captured the imagination of music connoisseurs all over the world.

Westminster Royal SE: The magnificent 530 litre cabinet with its complex horn loading system delivers greatly increased efficiency with a wave front area approaching that from real instruments. Effortlessly capable of resolving truly low frequencies and reproducing the dramatic dynamic range of music, the Westminster Royal SE will move you like few other loudspeakers can.

For those with smaller listening rooms, Tannoy has a range of smaller Prestige models, each just as special and just as magnificent in its own way.

SERIES: All Audio Note and Tannoy models available. Huge range on permanent demonstration.

The UK's best part exchange package on Tannoy Prestige**

Call us today for a complete system consultation by phoning us free on 0800 121 4771 or 4772.

www.jordanacoustics.co.uk

immerse yourself...
signal and the clean nature of the presentation.

However, when I replaced Kraftwerk with the Sugababes’ album, ‘Angels With Dirty Faces’ and the track ‘Stronger’, I almost triggered an accident as the clean sound was replaced with a frenzy of peak limiting distortion at very high volume! It took an athletic leap, head first, to the volume control to prevent a small explosion, shattered windows and a small mushroom cloud appearing over the roof, gently lifting into the sky. Actually, the system coped with this bedraggled track in a sympathetic yet honest manner. The worst aspects of the peak limiting, namely screechy upper-mid vocals and ear-piercing treble, were subdued and civilised by the Spendors although the stereo presentation.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

The system cried out for midrange balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.

The system was brought into question upon replacing the Astin amp back to its rightful place to achieve it. Was the system coped with this bedraggled track in a sympathetic yet honest manner? The worst aspects of the peak limiting, namely screechy upper-mid vocals and ear-piercing treble, were subdued and civilised by the Spendars although the stereo presentation.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.

The system cried out for midrange balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.

The system cried out for midrange balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.

The system cried out for midrange balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.

The system cried out for midrange balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.

The system cried out for midrange balance and clarity. It was with a sense of relief when I switched the Astin amp back to its rightful place to achieve it.

Problems did occur for the Astin/Spendor system however, when I played Carol Kidd’s ‘A Nightingale Sang In Berkeley Square’ from ‘Dreamsville’ (Linn). In fact, the general validity of this trio as a viable system was brought into question with a jazz approach. Apart from the rich double bass introduction with its deep, resonant tonal purity, the rest of the production suffered. Gone was the usual breathy Kidd vocal, her expressive delivery squashed in the middle-eight and subdued the accompanying piano. The excessive warmth was wholly due to the A5s. It was snappy yet firm.
Reeling In

The new X Series Walkman has been touted as the iPod beater which everyone knows Sony is capable of producing, but does it live up to the hype? Tim Jarman decides, with a little help from Sony’s past masters...

ON THE ROAD

The NWZ-X1060’s built-in FM radio proved okay, although tuning was tricky because it is done by scrolling up and down a list of every frequency in the band, and the receiver only updates when the numbers stop moving, so you don’t hear the stations as you scan past them. Charging of the built-in battery is via the USB lead, and because Sony don’t supply a separate charger you have to connect the unit to a computer for up to three hours to charge it up. This is not always convenient if for example you are way from home a lot.

Before I started serious listening, I first reacquainted myself with its main competitor, the ubiquitous Apple iPod Touch. As ever, the sound was superficially clean and full of detail via the Touch, although bass was weak and the treble had a slightly sibilant and gritty edge to it. The soundstage also did not appear to extend much beyond the headphones (in this case the excellent Sony MDR-D77). This is depressing, as we’ve heard every generation of iPod get worse in sonic terms, although needless to say the Apple machine still stands sublime, as is the wonderful iTunes software.

Sonically, when compared to the iPod, the NWZ-X1060 instantly had a fuller sound with a stronger bass line and the headphone stage gave the impression of being a more refined design, driving the phones with an authority that the Apple machine lacked. Although more effectively suppressed, the same grittiness was still there in the background, and this appears to be a side effect of the MP3 encoding which was in both cases 192kbps, the highest that the Microsoft software supplied with the Sony will allow. Still, the new Sony will play 320kbps AAC ripped via iTunes if you so wish, and it truly sings with the hills, if you can be bothered to find it!

PAST MASTERS

Sonically the Sony had the Apple licked then, but how did it fare against the stiffer competition of Sony’s own top models from yesteryear? Normally, a standalone review of a portable music player wouldn’t invite comparisons with this Japanese company’s illustrious past, but Sony boldly claim that the X-Series offers “the best ever Walkman sound quality”, no less! Oh dear, that’s precisely the sort of challenge that HiFi World can’t not take up...

Alongside a lot of decent, worthy but unremarkable stuff, Sony’s canon includes the very best Walkmans and Discmans ever produced, and these were duly wheeled out to meet the new challenger. Representing cassette we have the 1988 WM-DC2, the peak of development in the cassette line and bristling with refinements such as a quartz locked DD capstan motor and Dolby C NR. For Compact Disc, the mighty 1989 D-Z555 is the choice, in the early nineties this was a serious piece of kit that still stands up today. For MiniDisc, the 2006 MZ-RH1 will defend the format’s honour and finally Sony’s first real attempt to take on the iPod, the 2007 NW-HD1 hard disc music player, is brought into play. This is an impressive amount of firepower, and not something any other rival manufacturer, from Apple to Archos, could muster...

The NW-HD1 in its original form plays ATRAC files only and so the...
it's time for the big guns. Although not strictly a Walkman, the D-Z555 Discman is a practical portable device and a simply stunning performer. It offers the sort of "walk-in" soundstage that the smaller digital machines using their compression-based formats came nowhere near to matching, and the detail it could resolve was simply stunning. The angular late eighties styling may make you expect a hard-edged aggressive sound but nothing could be further from the truth, smoothness and refinement were the main characteristics of the '555. If there was a weakness it was that the headphone stage lacked the finesse of that used in the X-Series and the Hi-MD when extended, but using the MDR-D77 headphones the sound was so loud at this stage that it almost felt as if the world was going to end.

And so to the joker in the pack, the WM-DC2. Although it may look like the personal stereo that you once took to school this particular model is a real wolf in sheep's clothing. The combination of a genuinely stable tape transport, an excellent head and top-drawer electronics make the WM-DC2 as close to transparent as any cassette portable can be. This means that the quality of the results depend uniquely on your ability to master the tapes and the quality of the equipment that you do it on. With the other models I tested there is nothing much you can do about the basic quality of the software but the cassette Walkman lets you take the sound of your esoteric turntable and high-end phono stage with you. For this you'll need a top cassette deck to make the recordings, so it's not an easy thing to do, but if you can manage it the results are amazing. To some extent all the other machines never let me forget that I was wearing headphones but with the WM-DC2 I felt as if I was walking through an invisible concert hall, it really was that good. Against this there was a small amount of upper midrange muddle that has been largely eliminated in the squeaky clean digital world when sensible bit rates are used.

CONCLUSION

So, against such stiff competition, we cannot agree that the X-Series is the best sounding Walkman ever. Unfortunately for Sony, they've already made that, arguably in several incarnations! However, just because the PR hyperbole has been found lacking doesn't mean that Sony's latest Walkman is a stinker. Quite the reverse in fact, as it's clearly ahead of its greatest commercial rival, Apple's iPod Touch. The new X-Series is amongst the most impressive MP3 players that I've heard, and one simply must hear it before plumping for the default option iPod the next time you upgrade.

So why can I feel a tear forming in the corner of my eye as I flip through the album covers on that beautiful OLED touchscreen? I promised myself that I wouldn't use the word "derivative" in this review but it can't be done; the best old Sony personals were often so mould-breaking that they looked like they'd been found amongst the wreckage on the sands of Roswell, but the X Series feels little more than the iPod Touch Mk.II. It is a very fine machine, but still lacks that essential Sony-ness we all used to expect from a high end Walkman.
The all-new
M-series
from ROKSAN

High performance hi-fi separates
that will make your heart sing

To find out more about the M-Series of high performance hi-fi separates from Roksan, and where you can buy them
visit: www.henleydesigns.co.uk

HENLEY

www.henleydesigns.co.uk, 01235 511166

ROKSAN CENTRES OF EXCELLENCE
Midland Hi-Fi Studio, Wolverhampton • Audio Merchants, Glasgow • Sound Cinegy, Aldridge • HG Rapkin, Northampton
Home Media, Maidstone • Kronos Hi-Fi, Dungannon • Merlin Music, Melrose • Sevenoaks Sound & Vision, Yeovil
Sevenoaks Sound & Vision, Southgate • Sevenoaks Sound & Vision, Holborn • Technosound Systems Ltd., Dunstable
Hi-Fi Sound, Darlington • Unilet Sound & Vision, New Malden • Videotech, Huddersfield • Zouch Audio, Aby-De-La-Zouch
WORLD CLASSICS

DIGITAL
CAMBRIDGE AUDIO CD1 1986 £1500
Inspired Stan Curtis redesign of Philips CD104, complete with switchable digital filter. Lean but tight and musical performer.

CAMBRIDGE AUDIO CD458 1998 £300
A touch soft in the treble and tonally light, but outstanding in every other respect.

LINN KARIK III 1995 £1775
The final Karik was a gem. Superb transport gives a brilliantly tight, grippy dynamic sound, albeit tonally dry.

MARANTZ CD73 1983 £700
A riot of gold brushed aluminium and LEDs, this distinctive machine squeezed every last ounce from its 14x4 DAC -super musical.

MARANTZ SA-1 2000 £5,000
The greatest argument for SACD. This sublime Ken Ishiwata design is utterly musically convincing with both CD and SACD, beating most audiophile CD spinners hands down.

MERIDIAN 207 1988 £995
Beautifully-built two-box with pre-amp stage. Very musical although not as refined as modern Bitstream gear. No digital output.

MUSICAL FIDELITY TRIVISTA 2002 £4000
When playing SACDs, the sweetest, most lucid and lyrical digital disc spinner we've heard. Old school stereo, pure DSD design. CD sound is up in the £1000 class, too! Future classic.

MERIDIAN MCD 1984 £600
The first British 'audiophile' machine was a sweeter, more detailed Philips CD100. 14x4 never sounded so good, until the MCD Pro arrived a year later.

NAIM CDS 1990 £N/A
Classic Philips 16x4 chipset with serious attention to power supplies equals grin-inducing sonics.

SONY CDP-101 1982 £800
The first Japanese CD spinner was powerful and involving. Brilliant transport more than compensated for 16x2 DAC, and you even got remote control!

SONY CDP-RI/DAS-R1 1987 £3,000
Sony's first two box was right first time. Tonal lean, but probably the most detailed and architectural sounding machine of the eighties.

SONY CDP-701ES 1984 £990
Sony's first ever bespoke high end audiophile machine used a 16x2 DAC to provide a clinically incisive sound; supreme build quality allied to the pure unadulterated luxury of a paperbook-sized remote control.

TECHNICS SL-P1200 1987 £800
CD version of the Technics SL-1200 turntable. Massively built to withstand the rigours of 'pro' use and laden with facilities - a great eighties icon. Sonically, it's pure fun, with hefty bass that can still show weedy modern players a thing or two!

YAMAHA CD-X1 1983 £340
Nicely built 16x2 machine with a very sharp and detailed sound; sometimes too much so. Excellent ergonomics, unlike almost every other rival of the time.

COMPACT DISC TRANSPORTS
TEAC VRDS-T1 1994 £600
Warm and expansive sound made this a mild price hit. Well built, with a slick mech.

ESOTERIC P0 1997 £8,000
The best CD drive bar none; TEAC's Tokyo boys pushed the boat out in style. Brilliantly incisive, ridiculously over engineered.

KENWOOD 9010 1986 £600
The first discrete jap transport was beautifully done and responds well to re-clocking even today.

DACs
CAMBRIDGE AUDIO DACMAGIC 1995 £99
Good value upgrade for budget CD players with extensive facilities and detailed sonics.

DCS ELGAR 1997 £8500
Extremely open and natural performer, albeit extremely pricey - superb.

DPA LITTLE BIT 3 1996 £299
Rich, clean, rhythmic and punchy sound transforms budget CD players.

PINK TRIANGLE DACAPPO 1993 £N/A
Exquisite; the warmest and most lyrical 16bit digital audio we have ever heard. Clever plug-in digital filter modules really worked!

QED DIGIT 1991 £90
Budget bitstream performer with tweaks aplenty. Postiron PSU upgrade makes it smooth, but now past it.

In this heavily revised section, you’ll find the great and the good from audio’s glorious past. Most are seminal designs which have earned their place in hi-fi history, but you’ll also see some oddities which aren’t classic as such, but are great used buys. The year of introduction is given, alongside the original UK launch price. Think we’ve overlooked something? Then write in and let us know!
CLASSICS

**TURNTABLES**

**ARISTON RD115** 1972 £94
Modern evolution of 'Thorens' original belt drive paradigm. Scotland's original superdeck was warm and musical, albeit soft. Still capable of fine results today.

**ADC ACCUTRAC 4000** 1976 £300
Bonkers 1970s direct drive that uses an infra red beam to allow track selection and programming. More of a visual and operational delight than a sonic stunner.

**PIONEER PL12D** 1973 £36
The beginning of the end for the British turntable industry. When vinyl was the leading source, this bought new standards of noise performance and stability to the class, plus a low friction S-shaped tonearm. Later PL 12D was off the pace compared to rivals.

**PIONEER PLC-590** 1976 £600
Sturdy and competent motor unit that performs well with a wide range of tonearms. Check very thoroughly before buying due to electronic complexity and use of some now obsolete ICs.

**DUAL C505S** 1982 £75
Simple high quality engineering and a respectable low mass tonearm made for a brilliant budget buy. Polished, smooth and slightly bland sound.

**GOLDRING LENCO GL75** 1970 £15.65
Simple, well engineered motor unit with soft, sweet sound and reasonable tonearm. Good spares and servicing support even today from specialists. Emminently tweakable. Similar 88 and 99 motor units are budget 301/TDI24 rivals.

**LINN AXIS** 1987 £253
Simplified cut-price version of the Sondek complete with LVX arm. Elegant and decorously performing mid-price package. Later version with Akito tonearm better.

**LINN SONDEK LP12** 1973 £86
For many, the Brit superdeck; constant mods with Akito tonearm better. This early Japanese example of the tonearm art has a smooth, lyrical sound. Imported by Linn, fitted to early LP12s. Sonically way off the pace now, though.

**MICHELL GYRODEC** 1981 £599
Thanks to its stunning visuals, this bold design wasn't accorded the respect it deserved until recently. Early examples sound cold and mechanical, but now right on the pace. Clean, solid and architectural sound.

**TECHNICS SP10** 1973 £400
Sensible Japanese engineering. Sonics depend on plinths, but a well mounted SP1000 will give any modern a hard time, especially in respect of bass power and midband accuracy.

**REGA PLANAR 3** 1978 £79
Brilliantly simple but clean and musical performer, complete with Acos-derived S-shaped tonearm. 1983 saw the arrival of the RB300, which added detail at the expense of warmth. Superb budget buy.

**GARRARD 301/401** 1953 £19
Heavy metal - tremendously strong and articulate with only a veiled treble to let it down. In many respects, better than the seventies 'superdecks' that succeeded it.

**ROKSAN XERXES** 1984 £550
Supposedly the first to 'better' the LP12. Super tight and clean sound, with excellent transients. Less musical than the Sondek, but more neutral. Sagging plinth top-plates make them a dubious used buy.

**SONY PS-B80** 1978 £800
First outing for Sony's impressive 'Biotracer' electronic tonearm. Built like a tank with a clean and tidy sound, albeit lacking involvement. Scarily complicated and with no spares support - buy with caution!

**THORENS TD124** 1959 £N/A
The template for virtually every 1970s 'superdeck', this iconic design was the only real competition for Garrard's 301. It was sweeter and more lyrical, yet lighter and less impactful in the bass.

**TOWNSHEND ROCK** 1979 £N/A
The product of academic research by the Cranfield Institute, this novel machine has an extremely clean and fluid sound. Substantially modified through the years, and capable of superb results even today.

**TRIO LO-7D** 1978 £600
The best 'all-in-one' turntable package ever made, Trio/Kenwood threw their 'engineering best practice' book at this one with startling results. Clean, powerful and three-dimensionally sonorous, ultimately limited by the tonearm.

**TONEARMS**

**ACOS LUSTRE GST-1** 1975 £46
The archetypal S-shaped seventy's arm; good, propulsive and involving sound in its day, but ragged and undynamic now.

**AUDIO TECHNICA AT 1120** 1978 £75
Fine finish can't compensate for this ultra low mass arm's limited sonics - a good starter arm if you've only got a few quid to spend.
**INTEGRATED AMPLIFIERS/COMBOS**

DELTEC 1967 £1900

Fast, dry and with excellent transients, this first DPA integrated is the real deal for eighties obsessives. Ridiculously punchy 80W per channel from a tiny, half-size box. Radical, cool and more than a little strange.

ROGERS A75 1978 £220

The prototypical Audiolab 8000a – lots of sensible facilities, a goodly power output and nice sound in one box. The later A75II and A100 versions offered improved sonics and were seriously sweet and open to listen to.

EXPOSURE VII/VIII 1985 £625

Seminal mid-eighties Exposure pre-power, offering most of what rival Naim amps did with just that little bit extra smoothness and sweetness. Still, it's by no means ‘sweet’ by today’s standards, being lean, punchy, musical. It's also possessed of that quintessentially eighties look – frumpy black steel boxes with rough silk screened logos!

**CLASSICS**

ALEMBIC 1977

McIntosh MA6800 1995 £3735

Effortlessly sweet, strong and powerful with seminal styling to match.

SUGDEN A21 1969 £N/A

Class A transistor integrated with an enlivenedly likable smoothness and musically. Limited inputs via DIN sockets.

MISSION CYRUS 2 1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

Audiolab 8000C

**MUSICAL FIDELITY A11985 £350**

Regaling Class A integrated with exquisite styling. Questionable reliability.

NAIM NAIT 1984 £350

Superb rhythms and dynamics make it truly musical, but totally monochromatic. Fine phono stage, very low power.

NAD 3020 1979 £69

Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

**ROGERS CADET III 1965 £34**

Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm, a good introduction to valves.

**ROGERS A75**

The partner to the much vaunted Quad II monoblocks – cloudy and vague sound means it's for anachrophiles only.

**REL**

MUSICAL FIDELITY A11985 £350

Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

NAD 3020 1979 £69

Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

**QUAD 22**

1958 £25

The partner to the much vaunted Quad II monoblocks – cloudy and vague sound means it's for anachrophiles only.

**LEAK STEREO 60**

1958 £N/A

Leak's biggest valve power amp offers 35 Watts per channel and more low end welly than the smaller Stereo 20. Despite concerns over reliability their rarity means high prices are the order of the day.

**AMPLIFIERS**

1973 £N/A

Leak's biggest valve power amp offers 35 Watts per channel and more low end welly than the smaller Stereo 20. Despite concerns over reliability their rarity means high prices are the order of the day.

**CONRAD JOHNSON**

1982 £1,400

 Beautifully designed and built high end tube preamplifier with deliciously sweet and smooth sound. Not the last word in inovation or grip, but that didn't matter to those who aspired to it.

**CROFT MICRO**

1986 £150

Budget valve pre-amp with exceptionally transparent performance.

**CHAPMAN 305**

1990 £N/A

Leak's biggest valve power amp offers 35 Watts per channel and more low end welly than the smaller Stereo 20. Despite concerns over reliability their rarity means high prices are the order of the day.

**MUSICAL FIDELITY CS4040**

1986 £350

Superb rhythms and dynamics make it truly musical, but totally monochromatic. Fine phono stage, very low power.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.

**MISSION CYRUS 2**

1984 £299

Classic eighties minimalism combines arresting styling with clean, open, lively sound. Further upgradeable with PSU power supply.
LEAK STEREO 20  1958  £31
Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Impressively musical and fluid.

LEACON API  1972  £7-N/A
Madcap cylindrical styling allied to its 'power of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9  1997  £8000
Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

MICHELL ALECTO  1997  £1989
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca, this sounds delicious!

LEAK TROUGHLINE  1975  £520
Tremendously smooth and natural sound allied to low prices and good availability. Make this budget analogue esoterica. Needs a good antenna to work properly, however.

NAIM NAT03  1993  £595
The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500  1976  £295
Another of the serious classic solid-state designs. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

KRELL KMA100 II  1987  £5,750
Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallap put allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

QUAD FM4  1977  £180
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

REVOX B760  1975  £520
More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?

LEAK STEREO 20  1958  £31
Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Impressively musical and fluid.

LEACON API  1972  £7-N/A
Madcap cylindrical styling allied to its 'power of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9  1997  £8000
Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

MICHELL ALECTO  1997  £1989
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca, this sounds delicious!

LEAK TROUGHLINE  1975  £520
Tremendously smooth and natural sound allied to low prices and good availability. Make this budget analogue esoterica. Needs a good antenna to work properly, however.

NAIM NAT03  1993  £595
The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500  1976  £295
Another of the serious classic solid-state designs. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

KRELL KMA100 II  1987  £5,750
Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallap put allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

QUAD FM4  1977  £180
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

REVOX B760  1975  £520
More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?

LEAK STEREO 20  1958  £31
Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Impressively musical and fluid.

LEACON API  1972  £7-N/A
Madcap cylindrical styling allied to its 'power of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9  1997  £8000
Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

MICHELL ALECTO  1997  £1989
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca, this sounds delicious!

LEAK TROUGHLINE  1975  £520
Tremendously smooth and natural sound allied to low prices and good availability. Make this budget analogue esoterica. Needs a good antenna to work properly, however.

NAIM NAT03  1993  £595
The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500  1976  £295
Another of the serious classic solid-state designs. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

KRELL KMA100 II  1987  £5,750
Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallap put allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

QUAD FM4  1977  £180
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

REVOX B760  1975  £520
More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?

LEAK STEREO 20  1958  £31
Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Impressively musical and fluid.

LEACON API  1972  £7-N/A
Madcap cylindrical styling allied to its 'power of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9  1997  £8000
Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

MICHELL ALECTO  1997  £1989
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca, this sounds delicious!

LEAK TROUGHLINE  1975  £520
Tremendously smooth and natural sound allied to low prices and good availability. Make this budget analogue esoterica. Needs a good antenna to work properly, however.

NAIM NAT03  1993  £595
The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500  1976  £295
Another of the serious classic solid-state designs. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

KRELL KMA100 II  1987  £5,750
Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallap put allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

QUAD FM4  1977  £180
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

REVOX B760  1975  £520
More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?

LEAK STEREO 20  1958  £31
Excellent workaday classic valve amplifier with decent power and drive. Surprisingly modern sounding if rebuilt sympathetically. Impressively musical and fluid.

LEACON API  1972  £7-N/A
Madcap cylindrical styling allied to its 'power of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9  1997  £8000
Authentic reproduction monoblocks still more than cut the sonic mustard. Highly expensive and highly sought after.

MICHELL ALECTO  1997  £1989
Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca, this sounds delicious!

LEAK TROUGHLINE  1975  £520
Tremendously smooth and natural sound allied to low prices and good availability. Make this budget analogue esoterica. Needs a good antenna to work properly, however.

NAIM NAT03  1993  £595
The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500  1976  £295
Another of the serious classic solid-state designs. Boasts the usual high end Jap package of fine sound, brilliant sensitivity and superb build.

KRELL KMA100 II  1987  £5,750
Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallap put allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

QUAD FM4  1977  £180
Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

REVOX B760  1975  £520
More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?
SONY ST-5950 1977 £222
One of the first Dolby FM-equipped tuners, a format that came to naught. Still, it was Sony's most expensive tuner to date, and boasted a very good sound quality allied to brilliant ergonomics.

SEQUELLA MODEL 1 1973 £1300
Possibly the ultimate FM tuner. Massive in terms of technology, size and features dedicated to extracting every ounce of performance from radio, including impressive multi-purpose oscilloscope display.

REVOX A77 1968 £145
The first domestic open reel that the pros used at home. Superbly made, but sonically off the pace these days. B77 better, but couldn't match the Japanese.

TECHNICS ST-8080 1976 £180
National Panasonic's specialist hi-fi brand was a big hitter back then, and this is no exception. Superb FM stage makes for a very clean and smooth listen with lots of detail and depth.

SONY WM-D6C 1985 £290
Single capstan transport on a par with a Swiss watch, single rec/replay head better than most Naks. Result: sublime.

BBC LS3/5A 1972 £88
Extremely low colouration design is amazing in some respects - articulation, stage depth, clarity - and useless in others (both frequency extremes). Came in wide variety of gooses from various manufacturers building it under licence. Partner with Rogers AB1 subwoofers for an extra two octaves of bass!

HH ELECTRONICS TPA-50D AMPLIFIERS 1973 £110
Simple design with easily available components, solid build quality and fine sound make for a surprisingly overlooked bargain. Not exactly stylish, however.

LOWTHER PM6A 1957 £18 EACH
This seminal full-range driver is still manufactured. High sensitivity as fitted to many classic horn designs.

TANNOY WESTMINSTER 1985 £4500
Folded horn monsters which certain sound good if you have the space. Not the last word in tautness but can drive large rooms and image like few others.

JR 149 1977 £120
Infamous cylindrical speaker that was ignored for decades but now back in fashion! Based on classic KEF T27/BI 10 combo as seen in the BBC LS3/5a. Doesn't play loud, needs a powerful transistor amplifier, but rewards with fine clarity and imaging.

AIWA XD-009 1989 £600
Awal's Nak imitation didn't, but it wasn't half bad nonetheless. Massive spec even included a 16x4 DAC!

NAKAMICHI CR-7E 1987 £800
The very best sounding Nakamichi ever - but lacks the visual drama of a Dragon.

PIONEER CTF-950 1978 £400
Not up to modern standards sonically, but a great symbol of the cassette deck art nonetheless.

SONY TC-377 1972 £60/4
A competitor to the Akai 4000D open reel machine, the Sony offered better sound quality and is still no slouch by modern standards.

SONY MDS-JESSSES2000 2000 £900
The best sounding MD deck ever, thanks to awesome build and heroic ATRAC-DSP Type R coding.

PIONEER PDR-555RW 1999 £480
For a moment, this was the CD recorder to have. Clean and detailed.

MARANTZ DR-17 1999 £1100
Probably the best-sounding CD recorder made; built like a brick outhouse with a true audiophile sound and HDCD compatibility.

KENWOOD DM-9090 1996 £599
Super clean sound makes this an amazing portable, but fragile.

SPENDOR BCI 1976 £340
Celebrity HFD1300 tweeter meets bespoke Spendor Bextrene mid-bass unit - and the result is a beautifully warm yet well focused sound. A little bass bloom necessitates careful low-end mounting, but these prove that the seventies did have some fine designs after all.

QUAD ESL57 1956 £45 EACH
Wonderfully open and neutral sound puts box loudspeakers to shame. Properly serviced they give superb midband performance, although frequency extremes less impressive. Ideally, use in stacked pairs or with subwoofers and superspeakers.
Heybrook HBI 1982 £130
Peter Comeau-designed standmounters with an amazingly lyrical yet decently refined sound. Good enough to partner with very high end ancillaries, yet great with budget kit too. A classic.

Celestion SL6 1984 £350
Smallish two-way design complete with aluminium dome tweeter and plastic mid-bass unit set the blueprint for nineteen eighties loudspeakers. Very open and clean sounding, albeit course at high frequencies and limp in the bass. Speakers would never be the same again...

Magneplanar SMGA 198X £800
Technological loudspeaker with genuinely musical abilities; fast, smooth, open, dry.

Mission 752 1995 £495
Cracking Henry Azima-designed floorstanders combined HDA drive units and metal-dome tweeters with surprisingly warm results. Benign load characteristics makes them great for valves.

Mission X-Space 1999 £499
The first mass production sub and sat system using NXT panels is a sure-fire future classic - not flawless, but a tantalisingly unboxy sound nevertheless!

Yamaha NS1000 1977 £532
High tech Beryllium midband and tweeter domes and brush 12" woofers in massive sealed mirror image cabs equals stunning transients, speed and wallop allied to superb transparency and ultra low distortion. Partner carefully!

To advertise in this space please call 020 7372 6018 or email: advertising@hi-fiworld.co.uk
Llewellyn Bowen wannabe!

Advanced Acoustics provided two Corner Orbis panels and two Wall Orbis units for review and I spent several evenings experimenting with them in my own listening room. One of the biggest problems I have is that one of my loudspeakers is in front of a window and this hard reflective surface does tend to skew the soundstage somewhat. Whilst I normally move the loudspeakers for serious listening as a result, this isn’t something I’m keen to do too often as my Ferrographs are heavy, and I was delighted to discover that slipping a corner Orbis into the space behind the offending channel worked absolute wonders. The soundstage snapped back into perfect focus and finer details on the right hand side, which had previously tended to be a little jumbled as a result of those troublesome reflections, came back through loud and clear, as if neatly pushed back into place.

Moving the two Wall Orbis items around showed that the troublesome first room mode between loudspeaker and listener could be tamed very effectively, adding detail to upper bass and better focus to the lower midrange. However, one on each side of the room proved too much, but one on its own (on either side of the room) was not quite enough. Consequently I moved the second Wall Orbis to behind my listening seat and was pleased to hear that the low bass was now in no way curtailed by the introduction of these absorbent panels (which can be a side effect if you over-damp your room) and actually gained both impact and a better sense of timing. There was now no hint of a kick drum being lost in the mix, or a double bassist seemingly struggling to keep up with the rest of the orchestra; the Orbis panels seemed to help everything knit together perfectly.

As a final step, I did bring in the fourth panel and try it in several positions, but this did indeed prove a step too far in my relatively small listening room, muddying upper midrange and seemingly draining the life from more upbeat music, no matter where I placed it. As always, judicious experimentation is the key and make sure to use no more than you actually need!

In summary then, the Orbis Corner and Wall panels are highly effective room tuning devices. Whilst I personally feel that Advanced Acoustics’ conventional wall-mounted panels are a better visual proposition for permanent installations (as they are much slimmer and less noticeable), the fact is that the Orbis units can be easily moved around and also completely removed if required once your room is required for domestic duties once more. Consequently, they should be high on any serious audiophile’s audition list. A&S

[Contact: +44 (0) 1623 643609, www.advancedacoustics-uk.com]
SAVE UP TO 12.5% off the cover price when you subscribe to Hi-Fi World. That's an amazing £3.33 per issue, including postage.

FOR BACK ISSUES ENQUIRIES PLEASE CALL
01442 879097

OVERSEAS SUBSCRIPTIONS IF YOU LIVE OUTSIDE THE UK, PLEASE CALL FOR OUR LATEST PRICES
+44 (0) 1442 879097

SO WHAT ARE YOU WAITING FOR? CALL NOW!!!
SUBSCRIPTION HOTLINE 01442 879097
Lines open Mon-Fri 9.00-5.00 or (weekend answering service available)

FOR OUR ON-LINE MAGAZINE SEE P120
email: hifiworld@webscribe.co.uk
Fax No: 01442 872279
WHY SUBSCRIBE TO HI-FI WORLD?

- 12 issues a year delivered straight to your door.
- Be first to grab a bargain in our "Free Reader Classified Ads" section.
- Run by dedicated hi-fi engineers and enthusiasts.
- Subscribers receive a minimum 10% Discount annually.
- Hi-Fi World has become famous for its informative reviews and radical kit designs.

PLUS! Subscribe by Direct Debit and receive a 12.5% discount (UK only).

Instruction to your Bank or Building Society to pay by Direct Debit

Please fill in this form and send to:
Hi-Fi World, Webscribe Ltd, PO Box 464, Berkhamsted, Herts., HP4 2UR

Name and full Postal Address of your Bank/Building Society

To: The Manager
Bank/Building Society
Address
Postcode

Name(s) of Account Holder(s)
Branch Sort Code

Bank/Building Society Account Number
Reference

Instruction to your Bank or Building Society
Please pay Webscribe Ltd Direct Debits from the account in this Instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Webscribe Ltd and, if so, details will be passed electronically to my Bank/Building Society.

Signature(s)
Date

The Direct Debit Guarantee

This Guarantee is offered by all Banks and Building Societies that take part in the Direct Debit scheme. The efficiency and security of the Scheme is monitored and protected by your own bank or building society.

1. If the amounts paid or the payments dates change Webscribe Ltd will notify you 10 workings days in advance of your account being debited or as otherwise agreed.
2. If an error is made by Webscribe Ltd or your Bank or Building Society, you are guaranteed a full and immediately refund from your branch of the amount paid.
3. You can cancel a Direct Debit at any time by writing to your Bank or Building Society. Please send a copy of your letter to us.

TERMS & CONDITIONS: You will receive 12 issues per year. Minimum subscription term is 12 months. Prices include P&P and are correct at the time of going to press. All prices are quoted in sterling. Offer available for UK subscribers only. For enquiries relating to overseas pricing call + 44 (0) 442 879 097.

Send this form to:
Hi-Fi World, Subscriptions Department PO Box 464, Berkhamsted, Hertfordshire, HP4 2UR.
THE WHO
Who Are You?
Classic Records

Seen by many as the last proper album by the band (Keith Moon was to die soon after its release), this is a patchy album by the group's high standards, neither fully addressing contemporary themes or staying loyal to their roots. Fans should be happy however, as this is the best version of the album on vinyl ever released. An excellent master.

Classic Records supplied the LP in both 140gm and 200gm weights for review. One thing that has continuously bugged me for many a year is the difference between standard and heavy vinyl weights. Do they actually sound different? Most people say no, apart from a certain level of anti-warping protection that is offered by the thicker vinyl. Using both variants I was able to properly test for differences, utilising an Avid Acuteus turntable. Incredibly enough, I did hear sound differences. I express surprise because I really didn't expect any. What did clearly emerge was a greater depth to the entire presentation that worked like a pyramid, affecting the bass resonances the most and then trailing away as it reached towards the treble areas. So, on the 200gm version, the bottom end offered a meatier presentation whilst the midrange, less affected, still produced a fuller, slightly sweeter, tone.

I'm still not totally convinced however, that this test, successful though it was in this case, is a universal result. Classic Records has the most advanced vinyl production and pressing capabilities in the world and, to be frank, it has the capacity to exhibit improvements. Other record labels, with standard production facilities, might not show the same degree of enhancement, if at all. As such, all I can conclude is that in the case of Classic Records, 200gm is best. Middling though it is in the Who’s classic canon, 'Who Are You?' is still an enjoyable listen.

STEVE HILLAGE
Deeply Vale
Ozit Records

Steve Hillage is one of those musicians with a long illustrious career that too many people just don’t know about. He’s transcended entire genres with great success and is one of the best guitarists the UK has ever produced. Member of cult-prog rock outfits such as Uriel, Egg and Khan then the spaced out circus that was (and still is) Gong, Hillage went solo in 1975, releasing ‘Fish Rising’. After a range of solo albums, Hillage joined Techno Dub legends, The Orb in 1989 and then formed his own melodic trance/techno outfit, System 7 along with Miquette Giraudy, which is still recording original albums to this day.

This album, which has been produced on the back of recently discovered tapes, takes us back into Hillage’s past and his early solo years. Taped at the free rock outing, the Deeply Vale Festival in 1978, during Hillage’s ‘Green’ LP era when his work adopted tones of Pink Floyd.
Berlin-era Bowie and Prog, this double album, presented here in an attractive gatefold, takes tracks from the albums 'Green' plus 'Motivation Radio', 'L' and 'Fish Rising' and the Beatles cover, 'Getting Better'.

The live performance is excellent from Hillage, whose guitar work has always been one of the Seven Wonders Of Rock, but the LP sound quality is not exactly audiophile standard. This recording suffers from a bed of hiss that underlies the whole performance.

That said, as the only surviving transcription of the performance (we think), it serves as a valuable archive. Hillage fans should be happy that Ozi has prevented it from being lost forever. Limited to 500 copies, and arriving with a good quality gatefold plastic cover that opens with the sleeve plus poly-lined inners, this is a valuable and collectable release for Hillage cognoscenti.

MISSISSIPPI FRED McDOWELL
'I Don't Play No Rock'n'Roll'
Pure Pleasure

McDowell was blues through and through. When you hear him, you hear the likes of Charlie Patton with his gruff vocal style and aggressive guitar playing, utilising a bottleneck attack that took no prisoners. McDowell was an oddity in the blues scene because he appeared, during the mid-sixties, from nowhere as an ageing genius, amazing all who heard him. Other blues greats of the time had some form of archive to draw upon, 78s, old field recordings and the like...

The title of this album is both a measure of the man but also a back-handed dig at other artists in the contemporary blues field who watered down the blues to incorporate other genres. Possibly because they felt that the blues needed to be more progressive or possibly because they were chasing the dollar. McDowell was having none of it, however. Star fans did want it, as his works were covered by the likes of The Rolling Stones and Bonnie Raitt. That said, some blues purists thought that McDowell was 'selling out' because, like Dylan before him, he picked up an electric guitar and had a young white backing band for this 1969 release and, again like Dylan, the resultant music sounds pretty darned good.

The record, which was initially released on the Capitol label, has been mastered by Steve Hoffman in the USA from the original master tapes, and it shows with an excellent presentation. In conversation with Pure Pleasure owner Tony Hickmott, he did say that, as the original tapes were present in the USA, it was easier to ask the US-based Hoffman to master this release than arrange tape copies to be made and transferred to the UK. An excellent release and an essential listen for any blues fan.

POLYPHONIC SIZE
30 Years After - When The Size Was Polyphonic
Vinyl-On-Demand

Launched in 1979, this group, which combined electro with pop and a slice of new wave ethics thrown in for good measure, produced their first EP on the small underground record label, Sandwich Records. Later, friend of the band J-J Burnel, the bass player from The Stranglers, would produce and occasionally play and even sing with the band.

This set focuses on the first three years of the band's existence and is packed with rarities. The material includes unreleased tracks, demos and outtakes, all of the singles released in this period including the maxi singles plus the first LP produced by J-J Burnel. On top of that little lot are B-sides and rare tracks and unreleased material remastered from the band's founder, Roger-Marc Vande Voorde's own archives. The music itself ranges from a pastoral version of Kraftwerk with a smooth vocal blended with easy-going organic synth noises to a more, post-punk variable of, say, Wire. It definitely edges toward rather left-field regions of electro, that period when bands liked to portray a more robotic, dehumanised vocal style but, in this case, via the French language.

Presented as a luxurious box set, the package arrives in a pizza-style box. Insides are four LPs, each in their own wax-coated inner sleeve which are placed within their own outer covers plus a large format booklet printed in colour on thick card presenting lyrics, photographs and more. Limited to just 600 copies, this is a real treat for fans of the band and a discovery for those of us who enjoyed the electro stylings of the early eighties, a highly significant period when we were on the cusp of the digital age. An excellent and varied suite of music. PR
Riptide

It's hard for newcomers to get their heads around the subject, but playing music via computer networks is getting ever more popular. Indeed, as soon as you try it, you begin to see why. Having instant access to all your Compact Discs on one central server, with no need to faff around with CD jewelcases and storage racks is an amazing boon.

The trouble of course is that until recently the music itself has had to be stored on home computers, and this isn't the most elegant solution given that your PC or Mac is probably doing other things already. So what the world needed was a purpose-designed box that can store all your digital music, automatically ripping it in the best possible quality.

There have been several attempts at this, not least Ripfactory's Ripserver, but they've fallen by the wayside for a number of reasons. And now it's the turn of RipNAS to try. The maker of the new RipNAS is Illustrate, the company that first gave the world dbpoweramp CD ripping software which many folk who listen to their music from their computers via NAS (Network Attached Storage) drives will know and love, so it's off to a good start...

RipNAS is a bespoke NAS device in a small 240x250x190mm box, designed to let you feed your CDs into its slot and rip them to the built-in hard disk drive, along with all the associated metadata (album/artist/track, etc., information) and artwork. The idea is then that you play it through a network music player such as a Linn DS. Effectively then, you can think of the RipNAS as a kind of 21st century 'CD transport', while the network music player is the DAC.

Both the now-defunct Ripserver and the new RipNAS we're looking at here are both expensively priced in comparison to common-or-garden NAS solutions (the 1TB RipNAS here costs £875). But the experience of getting the best out of Digital Audio Extraction (DAE) doesn't come cheap; it's a job that is easy to do cheaply but hard to do well...

They are both, in common with most of the networked digital music community, designed to use lossless CDDA compression using FLAC, and allow for simultaneous high quality MP3 creation for mobile portable use. Both are designed to be usable by those unwilling to get into building their own machine to do this job.

Although both are effectively specialised, cutdown, headless PCs, built to a near silent fanless design, the Ripserver was cunningly built on the Linux operating system. In theory this was inexpensive and open-source, but in reality the last-minute change to the CentOS Linux distribution before shipping meant the whole thing was built on sand.

Take a look at the near-dead forum at www.ripserver.co.uk and you will read tales of units that simply stopped working under the weight of their own software complexity. The lack of support responses (even post-receivership the founder occasionally posted there) is in marked contrast to the vibrant, proprietor-led discussions on the www.dbpoweramp.com forum.

The proprietor (and the brains behind Illustrate and dbpoweramp) Steve Elkins, aka Mr. Spoon, had an altogether different plan. He had presumably spotted the viability of the slightly obscure Windows Home Server (WHS). It is a variant of Windows that unlike the abhorrent Vista actually quietly and unassumingly does the job it was designed to do, which is being the hub of a home network responsible for supplying resilient folder sharing, PC backup, media streaming et cetera. To these more solid foundations he added a carefully selected TEAC DVD drive (see the statistics on its exemplary error correction as a sticky on the RipNAS forum), and his already highly regarded accurate ripping and conversion software...

After the now defunct Ripfactory Ripserver comes the new Illustrate RipNAS. If hard disk based digital music is your game, then remember its name, says Patrick Cleasby...
(namely dbpoweramp), supplementing these with a music-only alternative to Twonky Media Server called Asset uPnP/DLNA.

Asset was developed in collaboration with Linn to provide a back end for their DS machinery, but is equally able to serve a surprisingly common uPnP front end like the PlayStation 3. The NAS could also service Sonos, although as that is 16bit only it needn't concern us here. As with the Ripserver, for networked iTunes integration the Firefly DAAP (Digital Audio Access Protocol) is employed, but here it is much more useful, as the RipNAS is cleverly able to present its FLAC files to iTunes as if they were .WAV files. Finally, and thankfully for the 24/96-capable Logitech Transporter community, Squeezecenter 7.3.2 (apparently once again to be re-baptised Squeezebox Server in the 7.4 I updated to) is provided out of the box.

**SET UP**

Like the old Ripserver, the RipNAS package consists of a simple black box (which in this case is flatter and more attractively presented with cooling heatsinks each side and a top grille), a manual, a laptop-type power supply and an ethernet cable. Both are PCs to which one can attach screens and keyboards, but you should never need to.

Thoughtfully, Illustrate have also supplied a PC Setup disc for Windows Home Server Connector (the means by which one adjusts settings and views ripping progress on the machine from your own PC), along with a system restore USB key and insertable CDs to trigger along with a system restore USB on the machine from your own PC), also supplied a PC Setup disc for should never need to.

**RIPPING AND AUDITIONING**

Starting off with the new RipNAS from scratch, I found myself spending a weekend simultaneously ripping CDs to it and copying some data over the wireless network. The 2GB of RAM enabled the RipNAS to cope impeccably with these simultaneous demands as a 'set up' task.

One of the great advantages that dbpoweramp has over the Ripserver alternative is that the software makes use of the internet-hosted Accuraterip database to check that you have a 100% perfect rip. The WHS RipNAS console gives a pictorial representation of the accuracy of the rips, calling them 'secure' if they were ripped successfully but not found in the Accuraterip database.

Given its fine build quality and the RipNAS...
Here's your chance to win one of the best modern miniature loudspeakers around, the Audiosmile Kensai, which received a rave review in the June 2009 edition of Hi-Fi World magazine! Here's some of what Noel Keywood said...

"I'm used to high quality miniatures, but still the Kensais took me by surprise. Not only are they deeply proficient at a technical level, they're beautifully voiced and sound wonderfully natural. Each speaker uses a small 12cm diameter magnesium coned bass/midrange unit. Magnesium is both light and very rigid, favoured in aircraft manufacture. Audiosmile have used a bass loading that gives about the deepest bass I have ever heard from a small cabinet. It was almost a shock, because not only does the Kensai go low but it also has an easy and natural rhythmic pace that made my bass-heavy test tracks from Angelique Kidjo albums sound perfectly weighted. They also use an Isoplanar ribbon tweeter; if you want to hear treble that's light, delicate and all but colour-free then an Isoplanar unit gets close to an electrostatic. Put all this lot together and you get a delightfully integrated sound from a loudspeaker that has a wonderfully consistent character, largely because the drive units not only work well in themselves but also together. The Kensai is fast, yet also pure in its tonality, with surprisingly little character of its own. The Kensai is quite forward, so makes its case known from the off. Celine Dion singing 'I'm Alive' was brightly lit and very expressive... what these speakers have is superb intelligibility. Meanwhile, bass was strong yet spry and punchy and the rhythmic timing spot on. This picture was repeated with Nigel Kennedy's engagingly energetic yet expressive renditions on violin of works such as Vivaldi's 'Spring', where every fine nuance of expression within his playing was captured with a surety that brought out his musicianship. The sudden, final adagio was a good example. I suspect this is partly explained by the Kensai's lack of hash and overhang. Strings were also very well separated with no sign of the agglomeration that dogs so many loudspeakers when attempting to reproduce violin. In a nutshell then, with their light, airy sound, wonderful detailing and crisp sense of timing, the Kensais reproduced violin almost to perfection. Audiosmile's new Kensai is a loudspeaker that justifies its manufacturers moniker: it made me grin alright. It's a nicely judged and thoughtful piece of engineering that produces a great sound, quite unique in many areas and very impressive too. So, if you are looking for high quality miniatures that seemingly offer the impossible from a diminutive cabinet, you'll find these raise more than just a smirk."

For a chance to win these great loudspeakers, just answer the following four easy questions. Send your entries on a postcard only by 31st August 2009 to: September 2009 Competition, Hi-Fi World magazine, Unit G4, Argo House, The Park Business Centre, Kilburn Park Road, London NW6 SLF.

RULES AND CONDITIONS OF ENTRY
- ONLY ONE ENTRY PER HOUSEHOLD
- MULTIPLE ENTRIES WILL BE AUTOMATICALLY DISQUALIFIED
- PURCHASE OF THE MAGAZINE IS NOT A PRE-CONDITION OF ENTRY
- NO CORRESPONDENCE WILL BE ENTERED INTO
- THE EDITOR'S DECISION IS FINAL
- NO EMPLOYEES OF AUDIO PUBLISHING LIMITED, OR OF ANY COMPANIES ASSOCIATED WITH THE PRODUCTION OR DISTRIBUTION OF THE PRIZES, MAY ENTER

entries will be accepted on a postcard only

JUNE 2009 MYRYAD Mi WINNER:
Mr. P. Ward of London
"this month's group test shows there's life in the old dog that is Compact Disc, yet..."

david price

As digital's dough cooked, or does it still need longer in the oven? It's a funny thing to say but digital audio - as we generally experience it - is past its sell by date. Undercooked but overripe, the specification of Compact Disc (and, by association, all its compressed and non-compressed computer file variants), is positively prehistoric.

Think of it like this. When CD was born in 1982, the business world was just beginning to adopt a radical new IT system called the 'IBM Personal Computer'. Sporting an Intel 8088 processor running at a dizzying 5MHz, it was essentially an 8bit 'silicon chip', and had I think 64K of memory, a black and white monitor and a tape drive. Times have changed in the computer world I should say, but a trip down to your local record store will show that the music sector has virtually stalled for a quarter of a century.

Indeed, the audiophile end of the hi-fi world has actually gone back to basics. By posting impressive hardware sales growth in the turntable market, it's the equivalent of the entire IT sector spurning their PCs and going back to DEC minicomputers, complete with open reel tape memory drives!

Of course, high quality digital has had its brief flourishes - rare moments in the course of recent history when it just about looked like the game was going to be moved forward. Digital Audio Tape, lest we forget, appeared just four years after CD, and in sound quality terms at least was a small but significant step forward. As anyone who's ever heard a DAT machine running at its native 48kHz sampling frequency will know, yes it really does sound quite a bit better. More open, smoother and more spacious, the big difference that slightly higher sampling frequency shows you just how marginal CD's 44.1kHz rate is. So much so that you almost get the feeling that it's '0.1' just about saved its life!

After DAT, we had DVD-Audio (DVD-A) and Super Audio Compact Disc (SACD). Like the proverbial London buses, two new formats arriving at the same time was just what we didn't want. Those working to ensure the survival of CD couldn't have planned it better if they'd tried. Actually, both formats had real merit, but they practically cancelled each other out. Punters were confused, and returned instead to their sixteen bit, 44.1kHz comfort zone of Compact Disc.

We did extensive measurement at the time, and I spoke to a lot of digital brainboxes like Professor Malcolm Hawksford. The consensus of opinion was that both new formats were flawed, but far less so than CD, and offered different 'flavours' of digital. DVD-Audio's 24/192 specification was technically superb, but the 'brickwall filtering' at very high frequencies (way past the audio band) could still in theory leave fingerprints further down the spectrum, which the ear could hear. SACD of course bypassed the need for such intrusive filtering, but didn't quite have the same depth of detail (i.e. resolution).

In practice, the two systems sounded superb - and different. DVD-A was super clean and detailed, with loads of physical grunt, whereas SACD was rather beguiling and sweet. Both were dramatically better to CD, but all my early listening tests ten years ago taught me something very interesting indeed...

Despite the impressive specs, so-called 'hi res' ultimately depended on the quality of the hardware involved, not the software. A real ear-opener was listening to Ken Ishiwata's super-tweaked CD63 KI DP CD player playing the CD layer of Simple Minds' "New Gold Dream" album, then switching over to a £2,000 Sony SCD-9000 playing the SACD layer. In almost every respect, save a degree of treble air, the hot-rodded CD player won hands down. The KI DP was (and still is) a brilliant CD spinner, but the Sony was no slouch as an SACD tool - so it shouldn't have been the rout it was.

So, given that 'it ain't what you do, it's the way that you do it', this takes us back to, errmm, the future. Hi-res audio does live on, in a way, via digital downloads from select labels such as Linn Records and Naim Label, and also in a round-about way via the new standards appearing on Blu-ray players. But it's fair to say that the world was offered the chance to buy better (and with SACD to keep CD too, so the discs would play on legacy machines as well), but it simply wasn't listening. Now we're back to the problem of making that Red Book CD standard, a thing of almost archeological interest as opposed to the 'white heat of technology', work half decently.

The good news is that ever better performing DACs, upsampling (where the 16/44.1 digital audiostream is spun up to twice or four times its native sampling frequency and then fed into 192kHz-capable DACs), and superior analogue audio output stages (sometimes even with valve buffering), can really polish the, errrm, whiffy thing.

This month's group test shows there is life in the old dog that is CD yet. A middling or ageing CD spinner can be usefully upgraded by buying a decent DAC, and if you've really got the funds to commit, the best modern technology means Compact Disc can be made to sound really rather good. Still, one of my gravest reservations remains - if only they could 'upscale' its nasty little jewelcases to full 'prog rock'-spec twelve inch gatefold LP size!
Think of your room as the loudspeaker box, but also think “outside the box”—lateral—when it comes to upgrading your system.

When you play music you “excite” the room. In fact, think of your room as the LOUDSPEAKER BOX WITH YOU INSIDE. More volume + more bass = more room reaction.

Speaker positioning is crucial, as is your listening spot. Play music and walk around listening to the room. Listen for STANDING WAVE peaks and troughs of bass, and site seat, speakers and equipment with care. Consider well-integrated “invisible” sub-woofers adjusted to CONTROL THE ROOM and its bass response.

Bass still boomy and slow? Don't assume you need more amplifier! Systems generate DAMAGING VIBRATIONS, from speakers and power supplies. Then cables transport it—superbly—shaking circuits and destroying detail and control.

Try a mains cable and a platform from Vertex AQ to BLOCK and DUMP these vibrations. You will be shocked at the gains and the cost-effectiveness, better than upgrading.

“So I have spent tens of thousands of pounds chasing insight and transparency, which ultimately took a £960 ‘add on’ to unveil.” Howard K, on the new HIREZ JAYA mains filter.

Who would you rather go to: a dealer who just sells you another amplifier, or someone who helps you find a SYSTEM SOLUTION? Ring us to TRY BEFORE YOU BUY.

Customers say we make some of the BEST SOUNDS in our studio they have ever heard, so you know we can do the same in your home. Our advice takes account of your best components and guides you where change is needed, in stages you can afford.

You AVOID EXPENSIVE MISTAKES, enjoy music and save money in the long run.

JUST LISTEN AND YOU'LL KNOW

CD: ACOUSTIC ARTS, BEL CANTO, GAMUT, RESOLUTION AUDIO, STELLO, WADIA.

VINYL: AESTHETICS, CLEARAUDIO, DNM, GRAHAM, THE GROOVE, LIEBIG, MICHELL, SUPRO, BLUE POINT SPECIAL, TRANSfiguration. TUNERS: MAGNAFi DYNAMAR.

AMPLIFIERS: BEL CANTO, CAT, DNM, GAMUT, HARCRO, HOWLAND, SONNETEER.

STELLO: LOUDSPEAKERS: AUDIO PHYSIC, DALL, ETHOS, GAMUT, NEAT, TOTEM.

CABLES: ARGENTO, CHOCO COL., DNM, KUBALA ZODIAC, NORDOST, SILOCO, SILTECH, VERTIX AQ

MAINS: Vertex AQ, SUPPORTS: ARSICLI, STANDS UNIQUE, VERTIX AQ

arpac

dynavector

focal

grado

haller

interac

rabbie

udos

wergard

yra

holm audio

hendarics acoustic

horse

norfolk

nottingham

noton

sigma research

shahman

sm2

sitech

stax

sumiko

trichord

well-tempered

hi-fi for grown-ups

heAr Why terry Bateman is so proud . . .

Bath

www.rightnote.co.uk

01225 874728

or lo-call

0845 230 7570

The Right Note

Music in the home

BATH

www.rightnote.co.uk

01225 874728

or lo-call

0845 230 7570

The Right Note

Music in the home

BATH

www.rightnote.co.uk

01225 874728

or lo-call

0845 230 7570

The Right Note

Music in the home

BATH

www.rightnote.co.uk

01225 874728

or lo-call

0845 230 7570

The Right Note

Music in the home

BATH

www.rightnote.co.uk

01225 874728

or lo-call

0845 230 7570
"master tapes are time capsules that contain the sights, smells and cultural coding of the performance..."

Paul Rigby

I'm fascinated by master tapes, not just because they hold the essence of the creative process. They're time capsules that contain the sights, smells and cultural coding of the performance. And not just because they provide the best quality sound that audiophiles like you and me adore. It's because they are rolls of mystery - and I do like a good mystery. The tape may feature labeling telling you who recorded it and when and what's on it. Other tapes have no labeling at all. No matter however, because you never really know until you play it. Yes, the tape may feature the recording of an album but will it also feature alternative takes, intriguing chatter from the band members, long forgotten songs or even music from other artists? It's not been unknown for studios to record over tapes meaning that, when an album session had finished from one band, the unused portion of the tape at the end contains part of a session from a completely different band or artist. You just can't tell!

Mark Powell, who runs the niche label Esoteric Records (part of the Cherry Red group (www.cherryred.co.uk/esoteric/index.htm)), is of the same mind. A big fan of prog, space rock and quality blues rock, Powell's label is packed with bands such as Hawkwind (via the Atomhenge imprint), Spooky Tooth, National Health, Man, Egg and Barclay James Harvest plus many more. He used to manage the Canterbury scene outfit, Caravan and has been in charge of a number of projects for a range of similar bands for just about all the major labels in the UK.

Powell is persistent in his search for sound quality and taking his search back as far as possible to the original source. This has meant that he is often able to exploit his excellent connections to utilise original multi-track masters, a highly privileged position to be in. In fact, many of the audiophile vinyl outfits that are featured in these pages never get anywhere near multi-track masters, even if they exist in the first place. This means that Powell can not only remaster his works from original tapes, but sometimes has the opportunity to remix them to take advantage of advanced studio equipment of today and, thus, to enable today's hi-fi equipment to extract even more information.

"For example, when we did the Man catalogue last year, particularly 'Back Into The Future', some of the album was originally recorded at the Roundhouse. I was able to go back to the original Roundhouse concert multi-tracks and add the entire show as a couple of extra bonus discs to that original release. We've recently been doing that with Hawkwind too. With the album 'Quark, Strangeness And Charm' we added an extra disc featuring alternative tracks and out-takes," said Powell.

It seems odd that in the twenty first century, we are still being surprised with finds, and not just via forgotten corners of dusty archival major label libraries. Sometimes these surprises occur when the band itself owns and stores its own tapes. Powell was responsible for the recent reissue of the Moody Blues catalogue via Universal. The band looked after their own master tapes. "I went to their offices and their tape storage room," said Powell, "and was able to wade through all the tapes myself. There were a number of things that were not clearly labelled or you suspected that there might be something interesting. During this time I stumbled over two completely unreleased songs that no one had ever heard of before. One, written by Justin Hayward, from January 1973 for an aborted album that would have followed on from 'Seventh Sojourn' (1972) but never had been released. There was another track that was found on the tapes for 'Every Good Boy Deserves A Favour' (1971) which was a Justin Hayward/Ray Thomas composition. When you rediscover this sort of thing, bands say, 'Oh, now I remember doing that, I'm glad you found it.'"

Another example occurred with a new Esoteric release, 'The Spooky Tooth Anthology 1968-1974'. The two CD package includes two previously unissued tracks: 'When I Get Home' and 'Something Got Into Your Life'. Both were included on a master tape from the 'Spooky Two' album. "These songs may have been found on the master tape," said Powell, "but they were recorded and promptly forgotten. The two forgotten tracks were recorded mid-November 1968 but the 'Spooky Two' album was recorded in January/ February 1969. In fact, the music for one of the 'missing' tracks was used within the 'Ceremony' (1970) album, which we have also released."

Powell's primary format is CD, and for digital fans out there, his works should be examined on sound quality alone. He produces his records via carefully selected mastering houses such as Audio Archiving Company in North London (packed full of original ex-Decca equipment). Finally, for analogue fans, Powell revealed the excellent news that Esoteric will be launching its very first vinyl editions soon using four Hawkwind albums to test the water. As soon as I can grab 'em, I'll review 'em!"
"THE ULTIMATE REAL WORLD TONEARM"

A new benchmark for musical communication - STEREO TIMES
One of the truly special products I've reviewed in the past 18 years - STEREOPHILE
Winner of Stereo Times magazine Most wanted component of 2005 award
The best tonearm I've heard - HI F I WORLD
So far ahead of the pack... looks about to lap them - STEREO TIMES

Multi-award winning ORIGIN LIVE TONEARMS make an enormous difference due to their leading performance. It surprises many delighted owners that changing to an Origin Live tonearm offers many times the improvements to that of a cartridge upgrade - ratios of over 4:1 on performance to price are easily possible - and lasts a lot longer. Why not experience a new level of musical satisfaction by owning one of these arms? See Origin Live web site for full information and reviews. To eliminate any risk on your part, the arms are offered with a full money back guarantee should you not be anything other than delighted.

Tonearm Models
Enterprise
Conqueror
Illustrious
Encounter
Silver
OL1

Closest to the original sound

UNIVERSAL MOTOR UPGRADE
Upgrades & replaces motors & power supplies for ALL belt drive turntables

"The single most important upgrade you can ever make to any record deck concerns the motor drive...nothing can prepare you for the shock of going DC. In a word, gobsmacking." - COMMON GROUND MAGAZINE
"It's value is nothing short of tremendous." - LISTENER MAGAZINE
"The LP12 remains a classic...but upgrade kits by Origin Live can bring a vast improvement to it's performance" - HI FI NEWS

UNIVERSAL TURNTABLE MOTOR KIT - No one would blame you for being sceptical of an easy to fit, inexpensive dc motor upgrade. Especially one that improves on the best of other power supplies costing over 4 times as much or your money back. It is simply impossible to imagine the level of improvement attained by eliminating the motor vibration that your stylus amplifies over 8,000 times! Our DC motor kit offers massive improvements to all versions of Linn Lingo / Valhalla, Rega, Systemdeck, Roksan, Rock etc. The kits consist of a drop in replacement high grade DC motor and off-board 2 speed control box. Why not order now? - see web site or phone.

Standard dc Motor Kit - £250
Advanced dc Motor Kit - £339
Ultra dc Motor Kit - £570
Upgrade Transformer - £195
Upgrade DC 200 motor - £129 with kit

ORIGIN LIVE
Tel/Fax: +44 02380 578877
E-mail: originlive@originlive.com
www.originlive.com

UK Dealers
Analogue Seduction
t: 01733 344 768
CAMBRIDGE

The Audio Consultants
t: 01189 819 891
READING

Jordan Acoustics
t: 0800 121 4771
SCOTLAND

All enquiries
Whest Audio Ltd
t: 020 3176 0376
whestworld@fastmail.fm
LONDON

www.whestaudio.co.uk

"this really is THE pinnacle in that sub-£5000 phonostage battle- you really need to hear it to believe it!!"

The all new PS.30RDT - £2799.00 incl VAT @ 15%

IT'S TAKEN THE WORLD BY STORM!
"the longer it takes to switch off FM, the more people will choose to listen via the Internet..."

steven green

In response to the Government proposing that FM stations should be switched off in 2015, I've started a 'Save FM' campaign whose main aim will be to try and stop the BBC switching off its national FM stations. Another aim will be to campaign for the BBC to switch its stations from DAB to DAB+ as soon as possible, and that they should definitely do this before the BBC's FM stations are switched off. If you support the campaign's aims, please sign up at www.savefm.org.

In my opinion, the most effective thing that people opposed to the plans for FM can do at the moment is to contact the BBC Trust (trust.enquiries@bbc.co.uk), and request that the Trust carries out a public consultation on the issue. The BBC Trust regulates the BBC, and in the Trust's own words it, "works on behalf of licence fee payers", and it says it will consult with the public "when there has been a proposal for a significant change to an existing service". Well, you don't get much more significant a change to an existing service than proposing to switch it off!

The main question that such a consultation should ask is obviously whether the public is in favour of FM being switched off in 2015, or whether they favour a more reasonable switch-off date, such as 2020 or 2025, which would allow the public to replace their existing audio equipment at a more reasonable pace.

Another important question that the public deserves to be asked is whether they think a digital radio system that is proposed to replace FM should provide the same level of audio quality as FM does?

The plans to switch off FM stations in 2015 were discussed on Radio 4's 'Today' programme, on 'Feedback', and on 'You & Yours' in the week following the announcement, and on each occasion the presenter said that they had received an overwhelming response from the audience, and that listeners were almost unanimously opposed to the idea. So I think that answers the question about whether the public is in favour of the plans as they currently stand. And it's common sense that no sane individual would actually want digital radio to deliver lower quality than FM does, yet that's precisely what anybody that currently receives FM with good reception quality will end up with if DAB replaces FM without the broadcasters switching to DAB+ first. So if the public isn't consulted on these issues, then to my mind it wouldn't be legitimate for the BBC to switch off its national FM stations, because doing so would clearly be acting against the will of licence fee payers.

When you look at the motivation behind forcing the public to adopt DAB as quickly as possible, the decision becomes even more outrageous. The official justification set out by the Department for Culture, Media & Sport is that switching off FM stations would save the commercial radio groups £40m per annum in transmission costs. But such cost savings are dwarfed by the estimated £5 to £7 billion that consumers would have to spend on replacing existing audio equipment that can only receive analogue radio - and why should the public bail out commercial radio anyway? And in return for spending so much money, the large majority of people will, in my opinion, receive no benefit whatsoever, because the vast majority will simply carry on listening to the same stations as they did on FM just at lower audio quality...

In reality, far and away the main reason behind this decision is actually because the broadcasters are petrified that the longer it takes to switch off FM the more people will choose to listen via the Internet rather than via DAB, and because of the almost infinite amount of choice available online, the broadcasters think that people who listen via the Internet would be less likely to listen to their stations. So consumers are effectively being asked to spend up to £7 billion so that the BBC and commercial radio can hang on to their listeners.

Considering that it was the BBC and commercial radio that recommended to Government that an early FM switch-off date should be set, and the Government merely went along with their recommendations, it would be nice to think that a BBC Trust consultation about the whole affair would ask the public whether it thinks that the BBC should take long-term strategic decisions that help it hang on to its listeners when such a decision is completely against the interests of licence-fee payers!

Another question they could ask is whether the public wants to adopt the twenty-year-old DAB system that the rest of the world has turned its nose up at, and especially at a time when there are technologies just over the horizon that promise to transform the speed of mobile broadband systems in a similar manner to when fixed-line Internet switched from dial-up to broadband? In fact, they could simply replace all of the above questions in the consultation with this one: are you in favour of being conned by the broadcasters?
ALTO PRODUCTS

Candoli Isolation Platform
Installed in minutes - improvements for life
10 day money back guarantee if not satisfied

£179 including post and packaging
- Mainland U.K.

01704 233644

Cymbiosis

Linn Products
Sondek LP12 specialist
setup, upgrades, rebuilds
25+ years experience with international reputation

Naim Audio
500 series stockist
always available for demonstration
Including DBL Loudspeakers

Arcam • Atacama
Chord Company • Denon
Dynavector • KEF
Kudos • Neat Acoustics
Quadraspire • Rega Research
Spendor & more...

We are hi-fi specialists, so please call us for
advice, recommendations and demonstrations

We always carry a selection of quality used hi-fi
check our website for more details

6 Hotel Street, Leicester, LE1 5AW
Tel: 0116 262 3754
e-mail: shop@cymbiosis.com

www.cymbiosis.com

Precision engineering
A passion for the music
Ortofon Cartridges
at last you will
find all the music
in your vinyl

Ortofon Cartridges

www.henleydesigns.co.uk

To find out more about the full range of
hi-fi cartridges from Ortofon, and
where you can buy them visit:
www.henleydesigns.co.uk

94 HI-FI WORLD SEPTEMBER 2009 www.hi-fiworld.co.uk
"DAB has absolutely no useful future. The £40 million already spent on setting up DAB was a waste."

noel keywood

never thought our wails of despair over the BBC's determination to impose DAB radio on us would ever be heard, let alone fall on fertile soil. But after reading Libby Purves's beautifully crafted protestation in The Times, followed by a coolly analytical critique in the Guardian, I was left in silent joy. Wow! People these days really do not want to tear down what serves them well just for the sake of it, and DAB is already a redundant technology; better technologies are around the corner. So spending more license fee payer's money on DAB makes no sense. Now others are joining us in our protest at VHF/FM switch off and the uselessness of DAB!

Whilst both Steve Green and I have constantly criticised the archaic nature and outdatedness of DAB, Libby Purves weaves her story around the day after VHF/FM switch off, a lovely hook if ever there was one. This is the day when the meek and innocent - pardon me getting Biblical! - wake to find their radios have gone silent. In particular, all those souls who cherish late night listening to their favourite programmes, or who love to wake up to chirpy morning radio providing news, chat and music through the smooth, mellow sound of VHF/FM will find it gone. Around 120 million radios will fall silent. Scaffolders across the UK will have nothing to sing to; car radios will retune to the buzz of ignition noise and old ladies will lose a domestic friend.

Shut off is scheduled to occur when more than 50% of UK radios can receive DAB and that, ipso facto, VHF/FM has become minority listening and can be switched off. That means around 60 million radios will be instantaneously reduced to silence, to serve their function usefully no more, reduced to junk although still fit and able for their purpose. What this means to the millions of listeners suddenly cut off doesn't matter one jot of course. Because shutting off VHF/FM serves the BBC's long term goals - to preserve its future - if no one else's.

But the long term goals of the BBC are another story. Let's stick with 'shut off' for the moment. At this time, not only will radios across the UK fall silent, a large transmitter network based on giant masts sited on distant hills will also be phased out. The Wrotham transmitter serving London isn't anywhere near London in fact; it is sited on a distant hill thirty miles South East in the fields of Kent. VHF/FM was based upon a network of transmitters far from the urban environment. Not so with DAB. Its shorter wavelength is less durable, more affected by obstructions such as hills and buildings. So whilst distant Wrotham, a memorable landmark only to sheep, is able to get through to London's teeming millions, the DAB transmitter at Alexandra Palace is deep within London's urban fabric and can reach neither my home nor Hi-Fi World's offices just three miles away. How sad is that?

The BBC has the answer: spend more on another 600 (yes, six hundred!) transmitters in the UK - especially by adding to them with a DAB network around £100m, to fund another transmitter to pop up close to you. Perhaps alongside the mobile phone transmitter sitting atop a school that everyone is already worried about. Quite rightly too: VHF/FM field strengths are usually miniscule because the transmitters are so far away. Local DAB transmitters will produce a high local field strength. If mobile transmitters are a concern, adding to them with a DAB network only increases fears. But whilst I doubt our children are about to get microwaved by DAB, we still do not need to increase the number of transmitters in the UK - especially by installing an already outdated radio system that will cost a huge £40m per annum to maintain and which, I believe, will be soon overtaken by a far more useful system.

Out of the home, I'll put my money on the mobile phone network rendering DAB unnecessary, because it is overwhelmingly more useful. It is already possible to get mobile internet and stream radio from the 3G network. Although this could clog it up, the mobile network, unlike DAB, is extensible and being continually improved to increase capacity and coverage, with 4G and other technologies over the horizon. It is likely to be able to cope with 128kbps radio streams, even to cars, in future. Wherever you can use a mobile on Britain's road network, your car can be online too - and this is intriguing. Pull into a layby and you can send a couple of e-mails, even a picture of the surrounding countryside. Your car could conceivably send its position home to the family, and a diagnostic message to an internet garage. Radio wise, it makes 1,000 or so internet radio stations available in the car. At home, internet radio makes more sense than DAB.

Put all this together and it means DAB has absolutely no useful future. The £40 million already spent on setting up DAB was a waste and spending more on another 600 transmitters only compounds the problem. This money could better be spent on maintaining the VHF/FM network so the apocalyptic switch off Libby Purves so deftly described need never occur. Britain does not need DAB.
"the pursuit of perfect sound can often leave some very basic safety precautions bypassed..."

adam

smith

My mind has been wandering to the topic of electrical safety this month, after a couple of happenings, although I hasten to add neither were of the 'fizz, crackle' variety! The first was the arrival of a new box of delights from good old eBay. Given that I have a Sony PS-Q7 mini turntable, I reasoned that I ought to have the rest of the early nineteen eighties FH-7 system to go with it. Well, sometimes such things take surprisingly little time on the 'Bay, and I found one for the princely sum of £28, albeit in a predictably filthy and non-working state...

It finally plonked on to the doormat last week, and I spent a good couple of hours cleaning and delousing it. However, my attention was grabbed by the fact that the mains lead had a large insulation-tape style bulge along its length, with two different leads protruding from either side; clearly this needed investigation before power was applied. What I found made me grimace, as I am used to finding extensions applied by wires being twisted together and then wrapped in tape, but this took things to the extreme, as all four wires had been stripped by about two inches, then merely laid together; how much of this has contributed to the intermittently non-working state... clearly this needed investigation before power was applied.

What I found made me grimace, as I am used to finding extensions applied by wires being twisted together and then wrapped in tape, but this took things to the extreme, as all four wires had been stripped by about two inches, then merely laid together; how much of this has contributed to the intermittently non-working state... clearly this needed investigation before power was applied.

It seems not as uncommon as I would like, that the pursuit of a perfect sound can often leave some very basic safety precautions bypassed. It does not even have to be as extreme as removing a fuse either; after all a few years back, many Linn LP12 owners swore that sonic improvements could be had by removing the wooden baseboard to the deck. Maybe it did, I cannot comment as I have never tried it, but all I do know is that suddenly there was 240V mains exposed underneath the deck, which is never a good idea. Some might argue that it would be pretty difficult to get a hand in there and I would concur, but what about the day the owner or owner's wife/partner/housemaid moves the deck to dust underneath it and does not realise? Few people appreciate that as little as 30 milliamps of an amp applied directly across the heart is enough to kill, and only an RCD directly on the socket will stop that if you inadvertently 'shake hands with the National Grid'.

As a final thought, as part of my day job before I come home, put on my tights and cape on and transfer my Y-fronts to the outside of my trousers in order to become 'Hi-Fi Reviewer Man'. I gained training that qualifies me to work on power supplies that can deliver up to 3,300 Volts and 50 Amps, and part of this involves the obligatory training video, featuring gruesome pictures of the burns, scars and leftover stumps of previous limbs that can result when things electrical go wrong. Remember that voltages can measure up to the thousands in valve amplifiers and electrostatic loudspeakers and safety should never be taken lightly. In fact, why not take a few moments next weekend to make sure that all your mains leads are in good physical condition, that your plugs have the right fuses in and that the connections inside them are done up tightly? Maybe you won't gain any sonic improvement from those newly tightened screws, but at least you'll be secure in the knowledge that you can listen in safety.
VINYL NEWS

vinyl section

contents

SEPTEMBER 2009  www.hi-fiworld.co.uk

INSPIRE ECLIPSE  100
Adam Smith auditions this brand new turntable from a brand new manufacturer, and finds it a most promising start.

TRANSFIGURATION TERMINATOR  
This fascinating new parallel tracking tonearm gets its first review from Adam Smith.

SOUNDBITES  107
David Price tries Origin Live's new 'Upgrade' turntable mat and Oyaide's HS-CF universal headshell...

CLARO CLARITY 09  108
This enigmatic, high quality turntable, made in a limited run of only thirty pieces, is reviewed by Adam Smith.

FAT POSSUM
Famed for offering down and dirty blues recordings from the likes of Junior Kimbrough and R.L. Burnside, Fat Possum Records has released three records of a slightly different, more contemporary, hue. Jack-O & the Tennessee Tearjerkers' 'Jack-O Is The Flip Side Kid' still proffers that blues vibe serving off the back of a raw production but adds high energy R&B to boot.

'New Moon Hand' features the crusty voice of Willem Maker, a singer/songwriter with an edge that'll cut your throat. He's angry, he's full of blues and he doesn't give a damn - but you should. Finally, John Paul Keith & The One Four Fives' 'Spills And Thrills' offers psychedelic garage rock and country blues with a sprinkling of surf guitar and throw-back rock 'n' roll.

THEY'RE DAMAGED
A splurge of vinyl from Damaged Goods Records includes the excellent 'Archive From 1959 - Billy Childish Story', a triple album, the package examines his rock and roll output, packaged in a double fold-out gatefold covering music from 1977 to 2009. Check out three Holly Golightly reissues: 'Painted On' (1997), mixing garage rock and R&B with an old Americana vibe, 'Up The Empire', a live recording of low-key, laid back tracks (1998) and 'Down Gina's At Three' (2004) which continues the mood, creating a fine ensemble piece in which her skill lies in her interpretive abilities. Also look out for The Chatham Singers' 'Juju Claudius', featuring Childish and his own brand of blues rock, plus Roxy Epoxy and The Rebound's 'Band-Aids On Bullet Holes', a mix of punk and synth rock.

MOTORHEAD TRIO
Fans of the metal masters will be interested to hear that Pure Pleasure has released '1916', the 1991 album release that maintained the outfit's strong sound. Mastered by Ray Staff, the album has been pressed by audiophile outfit, Pallas, in Germany.

Devil's Jukebox has also released a couple of Motorhead albums, two versions of the debut LP. The first, on Classic Records, offers a 'Super-CLR-X' profile, that removes the vinyl black to offer you a clear vinyl disc, providing improved sound quality due to the lack of those magnetic, ferrous particles. It's limited to 666 copies. As is the second edition, a DMM master on purple vinyl, that comes with a bonus, 1-sided 12" featuring a range of rare b-sides and the 'Beerdrinkers' EP tracks.
**VINYL NEWS**

**JAZZ FROM DOXY**

Corralling a range of classic jazz from the mists of time, Doxy has released another worthy batch including Bill Evans's 'Everybody Digs Bill Evans', the classic 1958 release that showed Evans as a brilliant interpreter of standards. 'Mingus Trio' is based on the Blue Note release, 'Mingus Three' (1957) with Hampton Hawes and Danny Richmond, one of only four trio albums Mingus made. An excellent recording that examines the blues from a bop perspective. Also look out for Miles Davis 'Miles 1954', a double album which collates the albums 'Walkin', 'Bag's Groove' and 'Miles Davis And The Modern Jazz Giants', Sun Ra's 'Medicine For A Nightmare: The Singles' from the mid- to late-fifties and The Modern Jazz Quartet's '2', combining the albums 'The Modern Jazz Quartet 2' and 'Concorde' from 1954 and 1955.

**WAX FROM WARNERS**

Warners has re-released some classic albums on its Back To Vinyl imprint, on 180gm vinyl. They include James Taylor's excellent 'Mud Slide Slim And The Blue Horizon', (1971). Featuring the hit single, 'You've Got A Friend' this is an album that exposes the soul behind the man who was, at that time, a depressed junkie who couldn't keep a girl to save his life.

Van Halen's self-titled album (1978) forced a sea-change in rock because of Eddie Van Halen's guitar style, David Lee Roth's circus showmanship and, above all, lean, honest music. Like The Sex Pistols' 'Never Mind The Bollocks', this album was a shock (in a good way). Also look out for the Misfits' 'Walk Among Us', a camp-punk classic from 1982 that gave Kiss a few lessons plus a couple of Van Morrison classics: 'Moondance' (1970) a light, if not sweet, work and 'Astral Weeks' (1968), an emotional outpouring of his past.

...AND FINALLY

Let's squeeze in a few more. First up is a new release via Naim and the wondrous guitar skills of Antonio Forcione. 'Ghetto Paradise' is a 1998 reissue of an uplifting piece of guitar-based jazz covering a range of styles. 'Flick The Vs' via King Creose (Domino) is Scottish singer/songwriter Kenny Anderson’s fifth album, that arrives with a MP3 download code within. A quirky folk-pop creation it also features krautrock, techno and electro. A sonic adventure. New out on ECM is Keith Jarrett's 'Yesterdays'. Joined by Gary Peacock and Jack DeJonette, Jarrett takes standards such as 'Stella By Starlight' and 'Smoke Gets In Your Eyes' and successfully transforms them for consumption in the 21st Century. A perfect link from past to present. Arriving as a limited edition pressing on yellow vinyl, complete with a free MP3 download offer, Paranoid Vision's 'Beware Of The God' (www.paranoïdivisions.com) sees the ageing Irish punks still able to produce bile on demand while rooted in trad-1977 rock vibes. PR
Adam Smith takes a listen to the stylish Eclipse turntable, from new British company, Inspire Hi-Fi...

Despite the resurgence in interest in vinyl going on at present, it is still quite something to see a brand new turntable launched by a brand new company, let alone two in a short space of time! The difference between the two is that the Claro Clarity09, reviewed on page 108, was developed by a company already well versed in engineering, but the Inspire Eclipse seen here marks a completely new departure for the man behind it, Robert Isherwood.

Robert spent thirty years in a career with the Royal Mail before taking early retirement in order to fulfil a long-held dream of making exclusive hi-fi equipment, and the Eclipse turntable is the first fruit of these labours, with the promise of a phono stage to follow in due course.

Robert's approach was a fairly simple and logical one. He explains that, "when I designed the basic prototype of the Eclipse, I had already listened to many turntables costing many thousands of pounds and I understood their limitations, in terms of both sound and looks. I wanted a product that would appeal to not only those reawakening to vinyl, but the younger generation who currently have a high end CD only system - I knew there was a growing market to tap into with the right products, built in the right way, and designed to impress in sound, looks and cost."

Consequently, Robert did not rush into anything and took time to consult experienced electronic and mechanical engineers who helped him to pull the final design together and finally put his ideas into practice. The end result is a turntable that consists of finely engineered parts, all of which are sourced from the UK, with the exception of the motor, which hails from Holland. Finally, Robert has aimed to price the deck at what he feels is a realistic point, undercutting more expensive decks that he feels the Eclipse is more than capable of tackling head on. So, what does your two and a bit thousand pounds buy you?

Essentially a two-part design, the Eclipse consists of an acrylic base board underneath which are mounted three feet. On top of this sits the main plinth, supported on three cone-shaped metal supports that locate in small cut-outs in the lower base. The cones are more complex than they first appear however, as they incorporate Sorbothane shock absorbers in their centres, for isolation and vibration resistance. The half inch thick metal subplatter is belt driven from an electronically controlled motor, and spins using a bearing and bearing housing that are individually machined to match each other. These items all support a 20mm thick machined aluminium platter with a glorious green tint to it and the boy racer in me can't help thinking a spot of LED illumination is called for here! Finally, a superbly machined record weight slips snugly over the spindle to hold everything securely once spinning.

The arm is mounted on a superbly machined arm base, and it is here that Robert has definitely thought 'outside the box' a little. Resisting the temptation to fit the highly competent but rather ubiquitous Rega RB251/301 variants, he looked further up Rega's range and, as a consequence, the Eclipse is available with the Inspire Tonearm 700 or Tonearm 1000, based upon, you've guessed it, the Rega RB700 and RB1000. The Eclipse can also be supplied with an SME armboard, or without arm, and complete with the armboard of your choice, so there should be something to please pretty much everyone here. Finally, the Eclipse comes with a neat black acrylic dust cover for the platter, and no it shouldn't be used as a turntable mat!

SOUND QUALITY

When you are the first reviewer to be lucky enough to have your grubby paws on a brand new design that no-one else has heard, there is always a sense of trepidation - what if it's no good? How does one break it to a hopeful new manufacturer...
that actually they
need to go back to the
drawing board! Fortunately,
with an Audio Technica AT-OC9MLII
strapped into the Tonearm 1000 of
the review sample, I quickly realised
that this was not going to be a call
I would be making. The Eclipse is a
beautifully balanced performer from
head to toe, and worked its spell
on me very quickly, although I was
pleased to hear that, as time went on,
the deck simply opened up more and
more to become a real dazzler.

Consider for a moment a few
of our favourite turntables here
at Hi-Fi World; the Michell Orbe
and GyroDec with their fabulous
soundstage width; the SME 10A with
its 'get up and walk around' image
depth; the good old Garrards with
their bass power that can frighten
horses and the high end direct drives
with their fleet-footed rhythmicality.
Well, the Eclipse is like none of
these; it seems to have no intention
of trying to topple any of these
decks from their respective perches.
Instead, it appears happy to sit quietly
at the side and simply get on with
making music, which is something
that it does brilliantly.

Dropping the stylus into the
opening bars of Roxy Music's 'Avalon'
showed that the Eclipse shines at
sorting out the finer details of music
and bringing them right out of the
loudspeakers. Bryan Ferry's vocals
were rich, intimate and emotive, with
the superbly tight rhythm section
backing him laid out immaculately.
Even better was 'I Can't Tell You
Why' from the Eagles' 'Hell Freezes
Over' double LP, which apparently
had Timothy B. Schmidt knelt in front
of me on the floor singing for me –
impressive if slightly disturbing.
At all times, the Eclipse excelled at simply
laying out the performance in a way
that made me feel I was hearing the
band exactly as they intended.

"it appears to have no desire to astound
in any one area, but affects an easy air of
complete competence in all of them..."
You don't know what you're missing — until you try a van den Hul cable in your hi-fi system

van den Hul cables provide a signal path for your music that will deliver it accurately and as completely as possible.

To find out more about the full range of interconnects, a/v, HDMI and speaker cables from van den Hul, and where you can buy them visit: www.henleydesigns.co.uk

Got CD's?

The Brennan JB7 is a new kind of CD player that holds up to 2,500 CDs. You can find and play a specific track or album from your armchair in seconds. Or play your entire music collection with one click. JB7 is the size of a large book and is simple to use. There is nothing else like it.

Top buys of 2008
"compact and ultra-simple... the JB7 shows superb clarity of thought and engineering"
GRAMOPHONE - January 2009

Analogue Seduction are dedicated towards two channel Hi-Fi, specialising in vinyl replay.

As well as our on-line shop we have dedicated demonstration retail facilities based in Peterborough, Cambridgeshire and we can offer our customers home demonstrations.

We stock the finest in amplification, analogue, digital replay and speakers. We also specialise in a cable termination and cable burn in service.

Please visit our website www.analogueseduction.net to browse or purchase products that are not easily available elsewhere.

New vinyl records now stocked

Tel: +44 (0)1733 344768
All this comes about as a result of the Inspire’s fine sense of uniformity and evenness across the midrange and treble. This flows together so well that the overall effect is to imbue music with a lush expanse of detail and ebullient warmth, but with a delicious sprinkling of light top end delicacy as a garnish. Acoustic instruments stand out as natural and full-bodied, whilst the Eclipse also easily captures the grittier style of electronic instruments and never leaves you in any doubt as to what is playing. An amusing example of this was a recent car boot sale seven inch single purchase of the Rah Band’s eighties-tastic classic ‘Clouds Across the Moon’ where the Eclipse pumped out the synth bass line with vigour, whilst the Eclipse also easily captured the grittier style of electronic instruments and never leaves you in any doubt as to what is playing. An amusing example of this was a recent car boot sale seven inch single purchase of the Rah Band’s eighties-tastic classic ‘Clouds Across the Moon’ where the Eclipse pumped out the synth bass line with vigour, yet added a delightful tremor to Liz Hewson’s vocals and melded the two perfectly.

At the low end, the Inspire is a solid and musically adept performer. True, it doesn’t dig as deep as my 301 but at the same time it never feels soft, or half-hearted at the bottom end, offering superbly layered detail and a fine dense of punch and timing. One slight caveat here, however, was that this good low end activity only really appeared after I fitted a slightly tighter belt to the deck – the one supplied seemed a little loose and, on occasion, I could sense it slipping very slightly. Fortunately, the Smith vinyl odds and ends box is positively overflowing with suitable candidates and substituting one of these made a big difference. I trust the manufacturer will take note, and keep a keen eye on belt sample variations...

A final honourable mention must go to Robert’s choice of arm – as regular readers will know I admire the Rega RB251/301 and believe them to be affordable marvels, but have long felt that perhaps they are not quite the best partners for some of the exotica upon which they sometimes find themselves perched. This is my first encounter with an RB1000, however, and I have to say it may look similar to the RB301 but it’s quite a different beast. The RB1000 has real depth, scale, insight and emotion and suits the Eclipse down to the ground. I have no doubt that an SME-equipped deck would be a wonder to behold but the RB1000 seems incredibly at home on the Eclipse – they make a formidable pairing.

CONCLUSION

Having determined that the Eclipse is not out to steal the respective crowns of the turntables mentioned earlier, I have to say that it reminds me in many ways of the Roksan Xerxes 20 Plus, which is to say it appears to have no desire to astound in any one area but to merely to affect an easy air of thorough competence in all of them!

Richard Isherwood took a gamble on his new baby, and I would say it has paid off handsomely, as the Eclipse/Tonearm 1000 combo is a capable vinyl spinner. It does what it does without recourse to any special tricks or eyebrow raising engineering innovations, but is simply superbly designed and built. Offering a fine mix of across-the-board musical ease in a well built and very stylish package, this turntable deserves a premium position on your audition list.

The Inspire Eclipse a highly impressive effort, making the Eclipse a highly impressive performer. True, it doesn’t dig as deep as my 301 but at the same time it never feels soft, or half-hearted at the bottom end, offering superbly layered detail and a fine dense of punch and timing. One slight caveat here, however, was that this good low end activity only really appeared after I fitted a slightly tighter belt to the deck – the one supplied seemed a little loose and, on occasion, I could sense it slipping very slightly. Fortunately, the Smith vinyl odds and ends box is positively overflowing with suitable candidates and substituting one of these made a big difference. I trust the manufacturer will take note, and keep a keen eye on belt sample variations...

A final honourable mention must go to Robert’s choice of arm – as regular readers will know I admire the Rega RB251/301 and believe them to be affordable marvels, but have long felt that perhaps they are not quite the best partners for some of the exotica upon which they sometimes find themselves perched. This is my first encounter with an RB1000, however, and I have to say it may look similar to the RB301 but it’s quite a different beast. The RB1000 has real depth, scale, insight and emotion and suits the Eclipse down to the ground. I have no doubt that an SME-equipped deck would be a wonder to behold but the RB1000 seems incredibly at home on the Eclipse – they make a formidable pairing.

CONCLUSION

Having determined that the Eclipse is not out to steal the respective crowns of the turntables mentioned earlier, I have to say that it reminds me in many ways of the Roksan Xerxes 20 Plus, which is to say it appears to have no desire to astound in any one area but to merely to affect an easy air of thorough competence in all of them!

Richard Isherwood took a gamble on his new baby, and I would say it has paid off handsomely, as the Eclipse/Tonearm 1000 combo is a capable vinyl spinner. It does what it does without recourse to any special tricks or eyebrow raising engineering innovations, but is simply superbly designed and built. Offering a fine mix of across-the-board musical ease in a well built and very stylish package, this turntable deserves a premium position on your audition list.

The Inspire Eclipse/Tonearm 1000

VERDICT

○○○○○

Superb build and finish allied to an effortlessly musical sound, makes the Inspire Eclipse a highly impressive debut.

INSPIRE ECLIPSE/TONEARM 1000

£2,400

Inspire Hi-Fi

+44(0)1246 588770

www.inspirehifi.co.uk

FOR

- balanced performer
- effortlessly musical
- design, build, finish
- elegant arm choice

AGAINST

- belt slackness on this sample
Is the architectural precision of Trans-Fi Audio's new tangential tracking Terminator T3 enough to tempt Adam Smith from pivoted pick-up arms? Read on to find out...

I was pondering to myself the other day that the recent upsurge in vinyl-related activity has brought forth a new breed of manufacturer and enthusiast. After all, consider for a moment that, back in vinyl's heyday, a good number of the machines that played it either came from a huge Japanese corporation, or from a well established engineering firm. However, moving forward to today, things seem to have changed a little...

You see, there seems to be creeping into the vinyl realm a few individuals for whom one name is sufficient: they lurk in the shadows of the market, occasionally swooping in to perform a feat of engineering daring and brilliance before returning to the darkness. They leave behind nothing more than a happy customer, a brief fleeting shadow on a wall and, more often than not, a breathless beauty of a product.

Number one in this field is our own favourite vinyl mad professor from north of the border, Audio Origami's Johnnie, but hot on his heels is a new contender; a man known only as "Vic". Vic, is, of course, the owner, founder and design boffin of Trans-Fi Audio, and regular readers may remember the Evolution tonearm that I reviewed back in the June 2007 issue of Hi-Fi World. It was cute but looked a little home-made, and I recall Noel and I harbouring ever so slightly uncharitable thoughts about how good it might (or might not) be when it arrived. The joke was on us however, as it turned out to be a brilliantly capable device that measured well and sounded even better. So the news that the Evolution had evolved into the Terminator sure made my ears prick up. This I just had to try!

The Terminator is indeed a notable step up for Vic, as it's nothing short of a superb piece of engineering. The basic recipe of parallel tracking air bearing is the same, but the whole design has been rethought, and cleverly so. The air trough is now inverted, and the arm saddle sits on top of it but with the arm itself hanging down underneath, resting in two supports in a knife-edge arrangement. This has allowed Vic to shorten the twin-walled carbon armtube and means that the Terminator has a smaller footprint than the Evolution, although it is obviously taller. Small thumbscrews allow for easy adjustment of the main air beam's levelling and a micrometer permits simple VTA adjustment, even whilst the record is playing if you're feeling brave! Vic is not a man who sits still however: Since supplying the review sample the design has moved on again to the T3 Pro, with superbly etched precision markings now showing VTA height (although the digital micrometer gauge is still an option), a sturdier yet simpler modular construction and the front of the arm housing bearing a 'Terminator' logo.

Fitting the arm is a little tricky as, although Vic makes it to fit the measurements of your deck that you supply when ordering, it conforms to no standard mounting pattern. As an example, the mounting spacer on the review sample was just the wrong size to either fit into a standard Linn hole, or comfortably locate above it - I had to raid the Smith washer tin to make some mods to suit. Also worth bearing in mind is the considerable weight of this solid construction. I had intended to try it out on my recently acquired Ariston RD80 but it sent the suspension crashing down to its bump stop, much like a hoodie crashing over a sleeping policeman in his Vauxhall Nova, as soon as I dropped it into place! Fortunately my Garrard 301 is made of sterner stuff...

That said, once the structure is in place, set-up is an absolute doddle. The arm wand simply lifts out of the cradle to allow cartridge fitment (and spares can be purchased for £100), and the owner, founder and design boffin of Trans-Fi Audio, and regular readers may remember the Evolution tonearm that I reviewed back in the
untapped holes in the headshell for simple fitting of cartridges whether they require a fixing nut or have their own tapped holes, and two counter-balance weights and a very long screw thread allow for a wide range of cartridge weights and tracking forces to be accommodated. Finally, a grub screw in the bearing housing allows the effective length of the tube to be varied according to deck and cartridge. With everything balanced and floating, I was ready to listen.

**SOUND QUALITY**

It seems fitting that this device is supported on a cushion of air, as 'air' was the first word that popped into my head as the Eagles launched into their live version of 'Hotel California'. This was because the performance stepped out into the room in a remarkable manner. Don Felder was larger than life on the right of the soundstage with Joe Walsh just on the left, and the way in which the boys filled the space in front of me was really most impressive, although I did note that the Terminator shares a trait with the Evolution in that the soundstage is not the widest in the game – it definitely tails off quickly beyond the limits of the loudspeakers.

A good parallel tracker should always offer a sense of cleanliness to the sound, owing to the lack of distortion from the right angle that the stylus maintains with the record's groove across the width of the playing surface, and this could easily be discerned through the Terminator. Top end detail was lush and superbly focused, but without any trace of harshness or sibilance. Cymbals tapped delicately sang out perfectly from the depth of the soundstage and steady hi-hat beats were snappy and crisp. Further down the frequency range, the Terminator proved adept at pulling the details of instruments to the fore, be they the acoustic guitars used by the Eagles, or the harpsichords interplaying expertly on Bach's 'Concerto in C Minor for Two Harpsichords and Orchestra'.

In all cases, the Terminator seemed well able to capture the innate essence of every instrument it was asked to play. Plucked guitar strings started with surgical precision and decayed softly into the distance, and yet, when I decided to spin the League Unlimited Orchestra's version of 'Don't You Want Me', from the 'Love and Dancing' album it proved equally happy and relaxed with the task at hand. This LP is an instrumental reworking of a handful of the Human League's hits and features some deliciously eighties synthesisers, naturally. The Terminator laid them out perfectly and made the differences between each one clear. Sadly my knowledge of synthesiser models is not as good as editor DP's, but I bet he could have named them all! [Roland System 700, Roland Jupiter 4, Korg 770, Casio VL-1 and Roland MC-8 Microcomposer.]

The detail retrieval abilities of the Terminator however, meant that I kept heading for the softer stuff to really hear it in action. A fine point during listening was Kari Bremnes' 'Lover in Berlin' from her 'Norwegian Mood' album and this really was a glorious performance. The lady's vocals are sublime; softly intoned, deliciously husky and backed with a solid double bass line and some ever so delicately felt percussion. Once again, soundstage width was not as capacious as say a Jelco SA-750D, but once again that fabulous insight made the whole experience captivating. A slight nagging concern did lead me to spin something a bit heavier and faster, namely the title track from the Kevin McDermott Orchestra's 'Mother Nature's Kitchen' LP and here the Terminator did show a slight weakness.

This recording is not an especially brilliant one, being rather compressed and 'busy', but the music bounds along with gusto and the Terminator cleaned the window into it very nicely. Where it faltered was by not quite grabbing the underlying rhythm that is buried in the depths of the groove – the aforementioned Jelco was definitely a little rougher around the edges but seemed to get into the swing of things with greater ease and more assured fluidity. Moving back to Kari Bremnes confirmed my suspicion that the Terminator is still soft and slightly lacking in focus at the bottom end; its bass goes deep and still offers fine levels of basic detail, but the overall performance is ever so slightly disjointed and restrained. Unfortunately this is rather spotlighted by the rest of the frequency range being so focused and competent.

"Trans-Fi have built on the strengths of the Evolution to offer a highly capable and enjoyable air bearing tonearm at an affordable price..."

**CONCLUSION**

We vinylistas can only be thankful for the aforementioned mystery men lurking in our midst. It is because of them that products like the Terminator exist and act as more proof that manufacturing in this country is far from dead! Trans-Fi audio have built on the strengths of the Evolution to offer a highly capable and enjoyable air-bearing arm at an affordable price. It is now better finished and yet more handsome, albeit in a Middlesbrough Transporter Bridge kind of way, and turns in a convincing performance. If your fingers are up to the rather fiddly task of fitting it, then the Terminator deserves to be high on your audition list.

**VERDICT 0000 £**

- Solid, well built and highly capable of extracting fine detail from those precious vinyl grooves, the Terminator means business.

**TRANS-FI**

**TERMINATOR T3 £650**

Trans-Fi Audio

www.trans-fi.com

**FOR**

- superb mid and treble detail
- impressive image depth
- industrial styling
- easy adjustments

**AGAINST**

- bass a little soft
- still not easy to mount
For almost 30 years, Wharfedale's famous Diamond speakers have served as the classic entry point to true high-fidelity sound, their exceptional value for money earning dozens of awards around the globe. Now, with the introduction of the Diamond 10 Series, Wharfedale has again raised the bar for affordable, high-performance loudspeakers.

The latest evolution of this classic speaker range builds upon the success of its multi-award-winning predecessors with numerous enhancements, including a more rigid enclosure and a high-gloss, polymer-finished front baffle, giving greater support to the new improved drive units. The result is a sound that’s crisp, focused and spacious, effortlessly dynamic yet firmly in control. Add the visual appeal of elegantly curved cabinets, enhanced by a choice of six perfectly formed finishes, and it’s clear: the new Diamond 10 Series is the sparkling jewel in Wharfedale’s crown.
In short, a platter mat must grip the record physically but at the same time mechanically decouple it.

Like many companies, Origin Live have been experimenting with turntable mats for a while, and their original 'Performance' mat [see Hi-Fi World, October 2008] has proved popular since its introduction. Indeed, one has found its way on to my Sony TT-S8000 direct drive, in preference to the Sony's standard oil-filled rubber mat, and even the Sound Dead Steel Isoplatmat, which I find works brilliantly on the Technics SL-1200 but not quite as convincingly on the Sony. The new OL mat is described simply as a 1mm thick disc made from a "mystery material mix". I can only add that it's slightly floppy and smells like a wheelie bin liner. It comes with a money-back guarantee if bought direct, and there's an introductory offer of £10 off the standard £39 price before the end of August.

On my aforementioned Sony direct drive with its slightly resonant aluminium platter, the difference between the two Origin Live mats was striking, even in the first four bar phrase of ZZ Top's 'Gimme All Your Loving'. Whereas the older mat was very lively and enthusiastic sounding across the midband, the new mat maintained the rhythmic punch while serving up a slightly deeper, darker sound. There was more definition to snare drums; I could hear precisely when they started and stopped, and their studio reverb, whereas the older mat gave a lighter, brighter but more diffuse sound. I found that the stylus seemed to scythe further into the innermost recesses of the mix, throwing more detail at me, or at least blurring what was already there less. There was no dramatic change in tonality, but the older mat definitely did seem to be adding a brighter light to the upper midband, along with slurring it slightly. With the 'Upgrade' mat, bass guitars sounded a tad deeper, rhythm guitars cut through the mix better and cymbals seemed a touch more realistic but with less glare. Overall, this is an interesting product, and I've no hesitation in recommending it. Of course it may not suit everyone, but there's always that money back guarantee. As for me, I'm sticking with the 'Upgrade'.

DP

[Contact: +44 (0)2380 578877, www.originline.com]

**SOUNDBITES**

**OYAIDE HS-CF HEADSHELL £100**

Back in the nineteen seventies, the first upgrade you could make to practically every turntable on sale was to buy it a decent headshell.

There were a number around, made of Carbon Fiber Reinforced Plastic, composed of seventeen layers of Toray 1k cloth carbon fibre material. The socket is made of aluminum with resin press fit inside. The pins are gold-plated brass, and the lead wires are 5N pure silver which are insulated with a double layered silk covering. The rhodium plated lead tip is made of phosphor bronze. Needless to say, being a premium priced Japanese product, the quality is superlative; think SME Series V fit and finish.

Compared to the stock Technics item on the aforementioned popular direct drive, I noticed a considerable improvement in mid band and treble focus using a Goldring G1042. Bass also got a slight fillip, but most impressive was the increased instrumental texturing and superior dynamics. Although not all the problems of the stock Technics arm can be attributed to its headshell, the Oyaide shows what a big difference a top notch headshell can make; it's just as profound an upgrade as any expensive turntable mat. Overall, a brilliant product and worth seeking out if you can bear its premium price. DP

[Contact: www.oyaide.com]

**ORIGIN LIVE UPGRADE TURNTABLE MAT £39**

Turntable mats are something of an inexact science. But going back to basics, and you can rightly state that mats have to decouple the record from vibration entering via the turntable; vibration which can be via ground borne movement caused by the speakers or general nasty noises from the turntable itself. Also, the action of the stylus in the groove can actually 'wobble' the record, so a mat has to grip the record and stop it vibrating as a result of the stylus's passage through the groove. Taking this to its logical conclusion, there's the possibility of slippage of the record as heavily modulated grooves impose a load on the platter and the point of least resistance gives way.

**www.hi-fiworld.co.uk**
Limited runs are often little more than a marketing wheeze, jazzing up a run of the mill mass production object with an aura of mystery. But in the case of Claro's Clarity 09 turntable, there really won't be more than thirty pieces made. Adam Smith explains why...

Limited Edition

In these recessionary times, there are some victims of the credit crunch that tend to go unnoticed. Certainly when a larger manufacturing company closes its doors, the results make the news, but the smaller engineering firms who maybe lack the incentive, vision or simply cash to widen their horizons and continue, simply slip away silently into the night. Fortunately, it would appear that Claro Precision Engineering is not destined to be one of these.

Claro's story goes back to 1978 when they started out as a toolmaking company, and later apparently gained an enviable reputation for making beer pumps! But it was more recently that the company was approached by a 'businessman' to design and manufacture a turntable, for which the mysterious customer would buy fifty units. Lots of hard work and £30,000 worth of investment later, the product was ready but the customer was nowhere to be seen, leaving behind unpaid bills and bouncey cheques...

Many lesser companies would probably have thrown in the towel at this point, thrown the bits away and headed down to the pub for a consoling pint, but designer Peter Curran and Managing Director Martin Doxey persuaded the rest of the company to take the bull by the horns and sell the decks themselves. A prestigious UK hi-fi dealer gave a helping hand by taking twenty to market under his own turntable's name, but Claro made a few tweaks, announced the birth of Claro Audio and the Clarity 09 was ready to go, with its strictly limited run of thirty items.

I have to say that the Clarity 09 is an impressive sight. On first perusal, it is not difficult to work out that a precision engineering company brought it here from the drawing board. Lest we forget, the likes of Avid and SME are also precision engineers who make components for other industries, so the fact that I am mentioning Claro in the same sentence as them for their first product is praise indeed. And it is certainly well deserved, as the deck is fabulously finished.

Technically, the recipe is very simple – a plinth made from aluminium machined to a tolerance of +/-0.01 mm is supported on three machined aluminium feet with upturned cones on which the deck rests. In the centre spins a CNC machined subplatter that is perfectly concentric and balanced, and on top lives a solid acrylic platter, machined and polished to give a completely imperfection-free frosted finish. Interestingly, the spindle is a separate item from the main bearing, which is a brave move given the possibilities of non-concentricity to which this can give rise; it's a lot easier to make the spindle and main bearing one item. However, any last doubts about Claro's engineering...
abilities should be nearly dispelled by glancing at the highly impressive wow and flutter figure of 0.035% that the deck turned in [see MEASURED PERFORMANCE].

Power-wise, the Clarity 09 is a twin motor design, and this gave Peter Curran his biggest headache. All the motors he tried were far too noisy and, when he found one that was quiet, it would barely move the platter! However, as Peter succinctly puts it "two times silence is silence" and so the decision was taken to use two motors; these sit opposite each other and their pulleys contain two grooves for speed change.

Interestingly, Claro use two separate belts, so one pulley has its 33rpm groove at the top and the other at the bottom. As both belts must be moved for speed change, which is a bit tricky, I developed a neat 'grab both, spin the subplatter through 180 degrees and release' technique that worked a treat. For arm mounting, our sample came with an armboard configured for the new Rega three point mounting, but those for the remaining decks are blank, and will be made to customers' requirements.

Finally, the deck is topped off by a stylish clamp with the Clarity 09 logo machined on top and this item caused the only hiccup of the review process - it's about the same size as a 45rpm single's label and I found the size of my cartridge crashing into it on a couple of occasions before the end of the record's runout groove had been reached, resulting in some worrying thuds through my loudspeakers - so best be quick with that cueing lever as the music fades!

SOUND QUALITY
It is surprising how the physical character of a component can be reflected in its sound, such as the airy sense of atmosphere offered by the airbearing Trans-Fi arm reviewed this month, and the Claro does it again. With a Rega RB1000 arm and Audio Technica AT-OFCMLII cartridge fitted, the first impression I had was of the sheer power drive and gusto that it has. Without wishing to upset the rubber band brigade, it sounds most unlike a belt drive deck, because bass is deep and confident, while rhythms are locked down tighter than a whale's blowhole at fifty fathoms [? Ed.]. Spinning some magnificent early nineties chart rubbish in the form of Haddaway's 'What Is Love' had my Ferrographs' B139 bass drivers really motoring, and I had trouble wiping the silly grin from my face. If you are a fan of low end action, as I am, this is a deck you need to check out.

Slipping 'Jupiter' from Holst's Planets Suite under the stylus, the Clarity 09 almost blew me off the sofa; the force of its presentation during crescendos had me edging the volume higher just to feel its impact. Yet during the quiet passages from the album I was pleased to hear that the Claro is not all bang and thump, as it has a wide and well-ordered soundstage, pushing out beyond the edges of the loudspeakers very nicely indeed. In the centre, things are not as deep and capacious as an SME 10A but then it should be remembered that the 10A is rather dearer, and to the bottom, the Claro is an even-handed and sanguine performer that never gets in the way of the music. Whether I chose to spin something loud and ridiculous, or something smooth and cossetting, the Clarity 09 was happy all the way, and is one of that select band of review items that had me spinning tunes far later than I intended. It resulted in a much bigger pile of played records than I had anticipated. Put simply, once you start listening to it, it's a shame to have to stop.

CONCLUSION
Although new to the hi-fi market, Claro Audio clearly know a thing or two about precision engineering, and the Clarity 09 turntable shows how much. The deck is magnificently designed, built and finished, and this shines through in its sound, which is confident, bold, detailed and never less than captivating. It's a fascinating proposition, making a fixed run of just thirty units, conferring as it does a degree of collectibility to the turntable. But I am told that if the Clarity 09 sells out, the company may come up with something even more exotic and expensive. All I can say is that, were I in the market for a new £2,000 turntable, I'd seek this one out with a great sense of purpose, worried that I might end up as number thirty one!
**AMPLIFIERS**
- JM Lab Chorus speakers
- JM Lab Electra CC30 centre speakers
- Sugden Amp Master Transimdance power amp
- Hybrid speaker new £3000 boxed
- Agoka Swan high efficiency speaker cult item
- Inn Kan with stands MK1
- Eema sub ex-dem
- BL century 100s
- Actin Lwan Aerius
- Actin Logan Aehus i
- Ingosound Queen Electrostatic speakers x dem
- Ube Technology Fusion integrated amp
- Inconeer Campian intated amp with equalisation controls
- Honos stage with external PSU new £1795
- Inn LK100 £225
- Ekau TL60 power amp mint condition
- Peli klAiiigrOjnArpemote boxed mint
- Renaissance music re-performance moving coil quad ODCZ4_popre amp unopened new
- Akamichi PA 7E power amp Nelson Pass 200w£795
- Elm 150 power amp boxed mint
- A m 112 pre amp remote control
- Musical Fidelity F15 hybrid class A power amp
- VIntage RECORDER anchors power amp
- Mclaren F3 SERIES PALO PRE-AMPLIFIER (£850)
- Exposure IV POWER AMPLIFIER
- Croft 5C, EL84 PARALLEL SE, 1250w (£3450)
- OtL 6AS7G OUTPUT TRANSFORMER -LESS (£2250)
- Art Audio VALVE PRE-AMP/PHONO STAGE, (£1250)
- Conrad-Johnson EVI VALVE PHONO-STAGE £1495
- Consonance CYBER 222 REMOTE CONTROLLED VALVE PRO-AMP (£4750)
- ProAc TABLETTE 2000

**TURNTABLES**
- Technics S8-F1 MKII honey comb disc speakers
- Tannoy Eclipse
- Royd Herald
- Ruark Equinox last edition
- Quad ESL 988 Electrostatic speakers
- Dynavector XX2
- TURNTABLES
- Technics SL150 direot dhve SME cut-out 1
- System Deck electronic DAC
- Meridian 563 DAC, MINT
- Shearne Phase 7 Anniversary CD Player (£1500)
- Inca Design Katana CD NM Player,
- California Audio Labs Tempest II CD Player
- Naim Credo's in cherry BEAUTIFUL, BOXED
- Opera Mini's
- Bow 602.5 S3 Speakers
- MM De Capo-I Reference 3A Speakers [0500]
- Rogers High
- Off axis DISTORTION TRANSFORMER LESS
- Integrated Amplifier
- Roksan Kandy ILIDVD player
- Nakamichi CD player 2
- Naim CD3 boxed as new
- NAD 525 BEE
- AMR CD 77 Tiannium finish flightcased x dem
- Transcption Uni Pivot tone arm
- Thorens 125 MKII Tumtable
- Superb plinth
- Technics S8-F1 MKII honey comb disc speakers
- Transcption Uni Pivot tone arm
- Thorens 125 MKII Tumtable
- Superb plinth

**CD PLAYERS**
-华南 RAMSAY (1250)
- Conrad-Johnson EVI VALVE PHONO-STAGE, (£1250)
- Echo CD CONVERSIONS AMAZING
- Shearne Phase 7 Anniversary CD Player
- Conrad-Johnson EVI VALVE PHONO-STAGE, (£1250)
- Meridian 563 DAC, MINT
- Shearne Phase 7 Anniversary CD Player (£1500)
- Inca Design Katana CD NM Player,
- California Audio Labs Tempest II CD Player
- Naim Credo's in cherry BEAUTIFUL, BOXED
- Opera Mini's
- Bow 602.5 S3 Speakers
- MM De Capo-I Reference 3A Speakers [0500]
- Rogers High
- Off axis DISTORTION TRANSFORMER LESS
- Integrated Amplifier
- Roksan Kandy ILIDVD player
- Nakamichi CD player 2
- Naim CD3 boxed as new
- NAD 525 BEE
- AMR CD 77 Tiannium finish flightcased x dem
- Transcption Uni Pivot tone arm
- Thorens 125 MKII Tumtable
- Superb plinth

**SPEAKERS**
- Jumpers iPod cables
- Sub woofer cables
- Firewire
- S video
- TANNOY ST -200 PRES.SUPER TWEETER (PAIR)
- PERFECT CONDITION
- B&W 9810'S, COMPLETELY RE-BUILT/REFURBISHED
- Spendor SP I 001, ROSEWOOD, BOXED,
-snakebiliti 2 years old, new £6500
- Quest 345 Electrostatic speakers
- BBH Eclipse test etude
- Black Triangle vertex with matching stands
- Clearaudio mini corner speaker pair
- Wharfedale diamond 221 (pair)
- Wharfedale diamond 221
- Gold Martin Floorstanding speaker with Yamaha D-5000
- Malaysian Swan Hifi efficiency speakers cul dem

**HEADPHONES**
- In ear Hifi Super one
- Beyerdynamic DT 880 PRO £295
- Sennheiser HD 800 £895
- Sennheiser HD 800 £895
- AKG K612 PRO £495
- Focal Clear Quad £1450
- Beyerdynamic DT 880 PRO £295

**SPEAKERS**
- Bigearsaudio UK £1000
- Technics S8-F1 MKII honey comb disc speakers
- Transcption Uni Pivot tone arm
- Thorens 125 MKII Tumtable
- Superb plinth

**CD PLAYERS**
-华南 RAMSAY (1250)
- Conrad-Johnson EVI VALVE PHONO-STAGE, (£1250)
- Echo CD CONVERSIONS AMAZING
- Shearne Phase 7 Anniversary CD Player
- Conrad-Johnson EVI VALVE PHONO-STAGE, (£1250)
- Meridian 563 DAC, MINT
- Shearne Phase 7 Anniversary CD Player (£1500)
- Inca Design Katana CD NM Player,
- California Audio Labs Tempest II CD Player
- Naim Credo's in cherry BEAUTIFUL, BOXED
- Opera Mini's
- Bow 602.5 S3 Speakers
- MM De Capo-I Reference 3A Speakers [0500]
- Rogers High
- Off axis DISTORTION TRANSFORMER LESS
- Integrated Amplifier
- Roksan Kandy ILIDVD player
- Nakamichi CD player 2
- Naim CD3 boxed as new
- NAD 525 BEE
- AMR CD 77 Tiannium finish flightcased x dem
- Transcption Uni Pivot tone arm
- Thorens 125 MKII Tumtable
- Superb plinth

**SPEAKERS**
- Jumpers iPod cables
- Sub woofer cables
- Firewire
- S video
- TANNOY ST-200 PRES. SUPER TWEETER (PAIR)
- PERFECT CONDITION
- B&W 9810'S, COMPLETELY RE-BUILT/REFURBISHED
- Spendor SP I 001, ROSEWOOD, BOXED,
**Heatherdale Audio Limited**

202 Finstock Road, Worthing, WEST Sussex. BN14 0JE

Tel: 01903-872298 or (after hours) 07860 660001 Fax: 01903-872234

e-mail: heatherdale@hifi-stereo.com //www.hifi-stereo.com

---

**SPEAKERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tannoy ST-200 super tweeters ex demo</td>
<td>£595</td>
</tr>
<tr>
<td>B&amp;W CM-1 speakers with stands</td>
<td>£125</td>
</tr>
<tr>
<td>Heles Trancendence 5 speakers</td>
<td>£299</td>
</tr>
<tr>
<td>Dynaudio Audience 7 speakers with stands</td>
<td>£385</td>
</tr>
<tr>
<td>B&amp;W M-1 speakers, black, Mintboxed</td>
<td>£195</td>
</tr>
<tr>
<td>B&amp;W M-1 speakers, silver, Mintboxed</td>
<td>£195</td>
</tr>
<tr>
<td>B&amp;W VM1 speakers with stands, black, Mintboxed</td>
<td>£295</td>
</tr>
<tr>
<td>B&amp;W AS2 active sub-woofer, Mintboxed</td>
<td>£195</td>
</tr>
</tbody>
</table>

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almarro A50125A int' amp, ex demo</td>
<td>£2250</td>
</tr>
<tr>
<td>Audio 9300M monoblocks with balanced (90000 pre amp</td>
<td>£1995</td>
</tr>
<tr>
<td>Weiss W-D850 monos (€16,500) as new</td>
<td>£7995</td>
</tr>
<tr>
<td>Almarro 318B (new)</td>
<td>£220</td>
</tr>
<tr>
<td>TRI TRI-900SE amplifier (now)</td>
<td>£4495</td>
</tr>
<tr>
<td>Meridian 951 integrated amp</td>
<td>£995</td>
</tr>
<tr>
<td>Rotel Caigan remote controlled int amp</td>
<td>£456</td>
</tr>
</tbody>
</table>

**PRE-AMPS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Levinson ML-369S pre amp with phono, ex demo, MINT (£5999) only</td>
<td>£6650</td>
</tr>
<tr>
<td>Kuzma 6 point tone-arm, as new, (£4500)</td>
<td>£3495</td>
</tr>
<tr>
<td>Kuzma Ebony record clamp, as new (£165)</td>
<td>£125</td>
</tr>
<tr>
<td>Dynavector O17 Kent MC cartridge, unused (£761)</td>
<td>£550</td>
</tr>
<tr>
<td>Dynavector 20X MC cartridge, unused (£449)</td>
<td>£550</td>
</tr>
<tr>
<td>Dynavector XX2 MC cartridge, unused (£999)</td>
<td>£1750</td>
</tr>
</tbody>
</table>

**AMPLIFIERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynavector XX2 MC cartridge, unused</td>
<td>£1495</td>
</tr>
<tr>
<td>Kuzma 6 point tone-arm, as new, (£4500)</td>
<td>£3495</td>
</tr>
<tr>
<td>Kuzma Ebony record clamp, as new (£165)</td>
<td>£125</td>
</tr>
<tr>
<td>Dynavector O17 Kent MC cartridge, unused (£761)</td>
<td>£550</td>
</tr>
<tr>
<td>Dynavector 20X MC cartridge, unused (£449)</td>
<td>£550</td>
</tr>
<tr>
<td>Dynavector XX2 MC cartridge, unused (£999)</td>
<td>£1750</td>
</tr>
</tbody>
</table>

**CD PLAYERS & TRANSPORTS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esoteric P-03 D-03 transport and DAC ex demo, full warranty</td>
<td>POA</td>
</tr>
</tbody>
</table>

---

**Miscellaneous**

- Selection OYAIDE plugs and power strips: POA
- Sony AYRM ST-SE70 Tuner: £75
- Audiophile Starbase 3 tier stand: £1900
- Nikon 17-55mm F2.8G IFED lens mint: £395
- Roksan Caspian remote controlled int amp: £456

**Sound Hi Fi**

- Focal 707TE
- Jelco SA-750D
- Avid, SME & other turntables

Avid, SME, Shelter cartridges, AT-OC9, Clearaudio, Jelco, Hadcock, SL-1200 mods

- Denon cartridges, The Cartridge Man, Marantz, Focal, Whist Audio, A.N.T, Puresound, Transfiguration, 78rpm

All demonstrated in a relaxing setting with river views! Very high part exchanges & mail order.

**MISCELLANEOUS**

**Speakers**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal 707TE</td>
<td></td>
</tr>
<tr>
<td>Jelco SA-750D</td>
<td></td>
</tr>
<tr>
<td>Avid, SME &amp; other turntables</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Accessories**

- Wallshelves, Isolation Platforms, Digital Tracking Force Scales, Cables: Decent Audio 0845 6019390

---

**Main dealer for Esoteric**
Come and hear the biggest performance improvement from an LP12 upgrade ever!

The new RADIKAL Motor Control Unit and URILA Phono Stage is now available for audition - A must for any serious LP12 music lover.

The New Lindy Radikal Motor unit

The Urika fitted to a Trampolin

HEATHCOTE AUDIO
T: 07860 511111  WEB SITE www.heathcoteaudio.co.uk
E-MAIL heathcoteaudio@aol.com

MAJORIT OF ITEMS STOCKED ARE 1 OWNER/NEW/N.O.S/OR EX DEM.
ALL MAJOR CREDIT DEBIT CARDS ACCEPTED

Come and hear the biggest performance improvement from an LP12 upgrade ever!

The new RADIKAL Motor Control Unit and URILA Phono Stage is now available for audition - A must for any serious LP12 music lover.

The New Lindy Radikal Motor unit

The Urika fitted to a Trampolin

HIFI WORLD SEPTEMBER 2009  www.bi-fjoworld.co.uk

HEATHCOTE AUDIO
T: 07860 511111  WEB SITE www.heathcoteaudio.co.uk
E-MAIL heathcoteaudio@aol.com

MAJORIT OF ITEMS STOCKED ARE 1 OWNER/NEW/N.O.S/OR EX DEM.
ALL MAJOR CREDIT DEBIT CARDS ACCEPTED

Come and hear the biggest performance improvement from an LP12 upgrade ever!

The new RADIKAL Motor Control Unit and URILA Phono Stage is now available for audition - A must for any serious LP12 music lover.

The New Lindy Radikal Motor unit

The Urika fitted to a Trampolin

HIFI WORLD SEPTEMBER 2009  www.bi-fjoworld.co.uk

HEATHCOTE AUDIO
T: 07860 511111  WEB SITE www.heathcoteaudio.co.uk
E-MAIL heathcoteaudio@aol.com

MAJORIT OF ITEMS STOCKED ARE 1 OWNER/NEW/N.O.S/OR EX DEM.
ALL MAJOR CREDIT DEBIT CARDS ACCEPTED

Come and hear the biggest performance improvement from an LP12 upgrade ever!

The new RADIKAL Motor Control Unit and URILA Phono Stage is now available for audition - A must for any serious LP12 music lover.

The New Lindy Radikal Motor unit

The Urika fitted to a Trampolin

HIFI WORLD SEPTEMBER 2009  www.bi-fjoworld.co.uk

HEATHCOTE AUDIO
T: 07860 511111  WEB SITE www.heathcoteaudio.co.uk
E-MAIL heathcoteaudio@aol.com

MAJORIT OF ITEMS STOCKED ARE 1 OWNER/NEW/N.O.S/OR EX DEM.
ALL MAJOR CREDIT DEBIT CARDS ACCEPTED

Come and hear the biggest performance improvement from an LP12 upgrade ever!

The new RADIKAL Motor Control Unit and URILA Phono Stage is now available for audition - A must for any serious LP12 music lover.

The New Lindy Radikal Motor unit

The Urika fitted to a Trampolin

HIFI WORLD SEPTEMBER 2009  www.bi-fjoworld.co.uk

HEATHCOTE AUDIO
T: 07860 511111  WEB SITE www.heathcoteaudio.co.uk
E-MAIL heathcoteaudio@aol.com

MAJORIT OF ITEMS STOCKED ARE 1 OWNER/NEW/N.O.S/OR EX DEM.
ALL MAJOR CREDIT DEBIT CARDS ACCEPTED
the experts in home entertainment

When you buy from Sevenoaks you are buying from one of the biggest, longest established and most respected Hi-Fi / Home Cinema retailers in the UK.

We have been making home entertainment come alive for customers for more than 37 years now. With a national network of stores and a hard-won reputation for outstanding customer service we are confident that we can do the same for you.

Our aim simply is to offer a total home entertainment solution, no matter what the customer's need.

news, the latest offers and more at www.SSAV.com
**Home Cinema & Hi-Fi**

From a straightforward high definition flat screen TV to a 1080p projector, from a DVD Recorder to a complete Blu-Ray based solution, we can offer every conceivable flavour of Home Cinema and Hi-Fi. Choosing components/systems that will get together correctly in your home is no easy task but our vastly experienced staff do it day in, day out so let us help.

**LCD & PLASMA SCREENS**

Pioneer G9 KURO Series Plasma TVs
50 & 60 inch models. Full 1080p HD ready.

Samsung
New range includes both full 1080p LCD and LED models.

Panasonic VIERA
Panasonic's new 2009 range includes plasma and LCD, full 1080p HD ready. From the 65 to 85 inch classes.

**DLP PROJECTORS**

InFocus IN80, IN81, IN82 & IN83
For an unforgettable experience, fire up an InFocus projector and start playing BIG moves, TV and games.

And with demonstration rooms in every store, you're positively encouraged to bring in your favourite discs or hook up your MP3 player to give a system a thorough workout before you buy.

**HOME CINEMA SEPARATES**

Yamaha
Yamaha's new 2009 range includes full new AV receivers, a new home cinema soundbar, and two TVs with built-in surround sound.

Onkyo
Onkyo launches the bar once again in the competitive world of home cinema with its TX-SR607 which features Dolby Pro Logic II support.

Denon
Denon has introduced the 10 series AV receivers. Models include AVR1610, AVR1910 and AVR2310.

Sony STR-DN820 & BDP-S550
Highly-acclaimed new AV receiver and Blu-ray disc player from Sony. (What Hi-Fi? Group Test Winner - March 2009)

**BLU-RAY DISC PLAYERS**

Panasonic DMP-BD60 & 80
Three new players from Panasonic's 3D stand featuring high-definition pictures and sound quality.

Pioneer BDP-LX91
View film exactly as the filmmakers intended; in 1080p resolution, at 24 frames per second with the BDP-LX91.

References...

**LOUDSPEAKERS**

Spendor A5 and A6
The A5 offers exceptional performance in relation to its compact dimensions. New design elements ensure clear and natural mid-range and bass-richly open the treble.

Monitor Audio Silver 5.1
A simple to install speaker system which gives a good balance of performance in relation to its price.

KEF KHT3005SE
Award-winning 5.1 speaker package available in high gloss black or silver.

**HI-FI SEPARATES**

Cyrus
Following the introduction of the Cyrus Evolution CD players, Cyrus has introduced a new range of amplifiers. Featuring a new built-in digital section, ideal for playing music on your computer - while the entry model 6 XP is based on the B XP but without the digital option. These new models also include a two-zone in-room capability.

Pro-Ject Genie MKIII
Replacing the Genie 2, the MKIII version includes a new motor, moveable motor base and a new tone arm with traditional anti-skate. Supplied with an OptiDrive Carbon tonearm fitted, the Genie MKIII is available in Standard Black with White, Piano Black and Red finish options available at extra cost.

Marantz SR8000
Bicentenary 150 years with Marantz, its Broad Ambassador. New folio design, includes the RR80 SACD player and integrated amplifier.

Pioneer BDP-LX71
Significantly new AV receiver and Blu-ray disc player from Sony. [What Hi-Fi Group Test Winner - March 2009]

**HOME THEATRE SEPARATES**

Monitor Audio
Award-winning Lektor 1, slightly larger than the Lektor 2. Only slightly larger than the Lektor 2. Only.

**Q Acoustics**
1010 S.1
Smart styling complements the Q Acoustics award-winning performance.
**ALL-IN-ONE SYSTEMS**

**Denon D-M37DAB**
- CD Direct function.
- Tones and balance controls and dock, high-quality circuitry.
- USB socket.
- iPod control via optional iPod dock.
- iPod docking station.
- This award-winning Zeppelin can be controlled via optional iPod, CD, Radio and Amplifier with iPod control via optional iPod dock.

**Arcam Solo Mini**
- Award-winning integrated CD Radio and Amplifier with iPod control via optional iPod dock.
- iPod docking station.
- This award-winning Zeppelin can be controlled via optional iPod, CD, Radio and Amplifier with iPod control via optional iPod dock.

**Teac Reference Series 380**
- This new three component system's strong feature set
- Amplifier and optional SC-M37 speakers.
- Denon's micro systems are back. This award-winning Denon D-M37DAB...
- **CLAIM FREE DMP-BD60 BLU-RAY PLAYER,** ANY AN OR HI-FI AMPLIFIER/RECEIVER

**MULTI-ROOM AUDIO**

**Sonsos**
- This multi-room digital music system lets you play your favourite tunes all over the house - and control them from the palm of your hand. You can even play different songs in different rooms.

**ESSENTIAL ACCESSORIES**

**SUMMER OFFERS MORE AT WWW.SSAV.COM**

**PURCHASE ANY A/V OR HI-FI AMPLIFIER/RECEIVER AT RRP AND CLAIM UP TO 30% OFF**

**THE RRP OF THE SPEAKERS OF YOUR CHOICE**

- **ARCAM CD17 CD PLAYER £599 RRP £700**
- **ARCAM SOLO MINI CLAIM MONITOR AUDIO BR1 SPEAKERS FREE**
- **NAD C545BEE CD PLAYER £799 RRP £899**
- **MARANTZ PM6002 AMPLIFIER £229 RRP £299**
- **DENON TU-1800DAB TUNER £199 RRP £299**
- **MARANTZ CD6002 CD PLAYER £229 RRP £319**
- **DENON D-M37 (EX SPEAKERS) CD/DAB RECEIVER £199 RRP £299**
- **Q ACOUSTICS 1010i AV SPEAKER PACK £449 RRP £549**
- **PANASONIC DMR-EK769 HDD/DVD RECORDER £249 RRP £319**
- **PANASONIC DMP-BD60 BLU-RAY PLAYER £199 RRP £279**
- **PIONEER PDP-LX5090 50" PLASMA TV £3199**
- **PIONEER PDP-LX6090 60" PLASMA TV £2099**

**ACCESSORIES INCLUDE**

**SUMMER OFFERS MORE AT WWW.SSAV.COM**

**MAIL ORDER PHONE LINES**

- **0800 587 9999**
- Can't get to one of our nationwide stores? Why not call our Mail Order Hotline? We have great products*, great prices and good old-fashioned service.

**Mail Order Hotline 0800 587 9999**

**OF YOUR CHOICE**

**ALL-IN-ONE SYSTEMS**

**MULTI-ROOM AUDIO**

**ESSENTIAL ACCESSORIES**

**SUMMER OFFERS MORE AT WWW.SSAV.COM**

**PURCHASE ANY A/V OR HI-FI AMPLIFIER/RECEIVER AT RRP AND CLAIM UP TO 30% OFF**

**THE RRP OF THE SPEAKERS OF YOUR CHOICE**

- **ARCAM CD17 CD PLAYER £599 RRP £700**
- **ARCAM SOLO MINI CLAIM MONITOR AUDIO BR1 SPEAKERS FREE**
- **NAD C545BEE CD PLAYER £799 RRP £899**
- **MARANTZ PM6002 AMPLIFIER £229 RRP £299**
- **DENON TU-1800DAB TUNER £199 RRP £299**
- **MARANTZ CD6002 CD PLAYER £229 RRP £319**
- **DENON D-M37 (EX SPEAKERS) CD/DAB RECEIVER £199 RRP £299**
- **Q ACOUSTICS 1010i AV SPEAKER PACK £449 RRP £549**
- **PANASONIC DMR-EK769 HDD/DVD RECORDER £249 RRP £319**
- **PANASONIC DMP-BD60 BLU-RAY PLAYER £199 RRP £279**
- **PIONEER PDP-LX5090 50" PLASMA TV £3199**
- **PIONEER PDP-LX6090 60" PLASMA TV £2099**

**ACCESSORIES INCLUDE**

**SUMMER OFFERS MORE AT WWW.SSAV.COM**

**MAIL ORDER PHONE LINES**

- **0800 587 9999**
- Can't get to one of our nationwide stores? Why not call our Mail Order Hotline? We have great products*, great prices and good old-fashioned service.

**Mail Order Hotline 0800 587 9999**
LFD is just another amp – right?

Yeah – like a diamond is just another chunk of carbon!

I'm Howard Popeck – the owner and sole employee here. I've been in this business, on and off, since 1976. LFD produce the most musically credible amplification I've ever heard, heard or sold. Simple as that. Today, through choice, the only analogue amp I represent is LFD.

On demonstration I have the majority of the range: Integrated LE Zero Mk4; NCSE integrated; PA2M SE power amp; LineStage 2; PA3 mono power amps; DAC-3; MCT phono stage and more. I offer you a range of previously owned units from £395 inc VAT. So, your place or mine?

Uncertain how much you should spend on your LFD? I have the answer! Choose a small inexpensive piece, try it for 90 days to ascertain if it will give you the sound you want, and if it doesn't meet your requirements, 'trade-up' to a superior model without any loss on your original outlay. You just have to pay the difference in price between the two models.

In a nutshell: It's LFD – but done right!
I. Also Supply:


II. Government:

- Ash Design, Apollo, Alphason, B. D. I.
- Stax, AKG, Black Rhodium, Transparent QED, IX
- Heed, Graham Slee, Pure Sound, Aesthetix.
- Wireworld, Kemp Electronics, Jual, B.C.D. CU

III. Save Up To 60% Off the RRP.

- Tom Evans Groove X
- Grado RS1
- West Audio PS3 or
- Sumiko BPS EVO III

IV. Trade In Your Old Moving Coil Cartridge & Save Up To 60% Off the RRP.

- Analek-Research
- Ordering. All goods are brand new & boxed with full U.K. guarantees. No ex. demo or ex-display goods. No grey imports.

V. Tel Sussex: 01273 261 229

- Analek-Research
- Tel: 01461 287252 / 88010

VI. www.hi-fiworld.co.uk

- Orange Audio valve Re amp with MM/MC. Boxed.
- Quad 33 pre amplifiers. From...
- Truly stunning original Quad II valve power amplifiers with GEC valves. Boxed. An investment at only....
- Rotel 850 stereo tuner. £29
- Akai AT-K33/LE MI AM stereo tuner. Mint & boxed
- HiQ balanced phone pre/had amp. Awesome.
- Quad ESL57 speakers. Excellent sound. £175
- Celestion DL 12 flat aanding speaker. £129
- What-a-deal Union XP2 speaker. Outstanding. £80
- Nad 504 CD player. Ex condition No display
- Dual CS505-3 turntable. Good condition. Black.
- Technics SL-150 turntable. Cut out for SME3009. GC
- Akai ARD33C record deck. Drive. Mint & boxed
- Pioneer PL-218 direct drive record deck. Mint & boxed
- Mission 7745 talcum with damping trough.
- Aram Alpha 10 int amp. Boxed & mint. £799
- Pair Marantz MA5's. Class A. 110V. Awesome.
- Mad 7011 stereo receiver. 2 x 25W with phone
- Quad 303 power amplifier. Nice condition.
- Radford SC22 pre amplifier. Excellent condition.
- Pioneer A300X integrated amplifier. Nice condition.
- Shanling MC301X. Integrated Valvetransistor amplifier/CD player. Bui it
- Musical Fidelity T I FM tuner. Awesome. £1,300
- Revox G36 valve reel to reel player. 3.75 and 75 IPS. Needs to be mounted in box/cabinet. Nice original cond.
- Pro Tones 0.1 uf paper in oil capacitors. 500V. 10%
- Revox A77 reel to reel player. 3.75 & 75 IPS.
- Shure M75 cartridge. Excellent condition.
- ICef B200 units X 2. Clonal condition.
- Cambridge Audio CD5. Black finish. Fixed/remote
- SME 3009 series II improved/non improved from...
- Arcane Alpha 8 RSE Pre amplifier. Ex condition.
- Quad 405/1. Excellent condition.
- Leak Stereo 20 full rebuild using Paper in oil caps. £299
- Nova 312 integrated amplifier. £479
- Amain Alpha 9 integrated with remote & MM/MC
- Plinius 21001 ClassAB int line amp. Boxed. 100W
- CR Developments Romulus int valve amp. Superb.
- Musical Fidelity A100 pure class A integrated 50W
- Quad 44 pre amplifier. Excellent and with manual.
- Leak Stereo 20 rebuild. £799
- Geir Aasen	10. Phase belt drive. £599
- Sumiko BPS EVO III speaker. £195
- Yamaha SP20 speaker. £239
- George stands for £1S63 speakers
- Meridian 200 CD Transport. Excellent condition.
- Arcane Alpha 7SE CD player. Award winner.
- Goldring 1022GX cartridge. MM. Little use. Boxed
- Audicricte Ama. Silver wired. Casts new £594.00
- Rotel RCD-970BX CD Ex condition. Remote
- Sony CDP-S9000ES SACD/DVD player. Awesome
- Nad 412 tuner. Mint/boxed/boxed original receipt.
- Pioneer TX-(08L tuner. FM, LW, MW. Mint & boxed.
- Quad 44 pre amplifier. Excellent condition.
- Leak Stereo 20 rebuilt. £799
- Geir Aasen	10. Phase belt drive. £599
- Sumiko BPS EVO III speaker. £195
- Yamaha SP20 speaker. £239
- George stands for £1S63 speakers
- Meridian 200 CD Transport. Excellent condition.
- Arcane Alpha 7SE CD player. Award winner.
- Goldring 1022GX cartridge. MM. Little use. Boxed
- Audicricte Ama. Silver wired. Casts new £594.00
- Rotel RCD-970BX CD Ex condition. Remote
- Sony CDP-S9000ES SACD/DVD player. Awesome
- Nad 412 tuner. Mint/boxed/boxed original receipt.
- Pioneer TX-(08L tuner. FM, LW, MW. Mint & boxed.
- Quad 44 pre amplifier. Excellent condition.
- Leak Stereo 20 rebuilt. £799
- Geir Aasen	10. Phase belt drive. £599
- Sumiko BPS EVO III speaker. £195
- Yamaha SP20 speaker. £239
- George stands for £1S63 speakers
- Meridian 200 CD Transport. Excellent condition.
- Arcane Alpha 7SE CD player. Award winner.
- Goldring 1022GX cartridge. MM. Little use. Boxed
- Audicricte Ama. Silver wired. Casts new £594.00
- Rotel RCD-970BX CD Ex condition. Remote
- Sony CDP-S9000ES SACD/DVD player. Awesome
- Nad 412 tuner. Mint/boxed/boxed original receipt.
- Pioneer TX-(08L tuner. FM, LW, MW. Mint & boxed.
- Quad 44 pre amplifier. Excellent condition.
- Leak Stereo 20 rebuilt. £799
- Geir Aasen	10. Phase belt drive. £599
- Sumiko BPS EVO III speaker. £195
- Yamaha SP20 speaker. £239
- George stands for £1S63 speakers
- Meridian 200 CD Transport. Excellent condition.
- Arcane Alpha 7SE CD player. Award winner.
- Goldring 1022GX cartridge. MM. Little use. Boxed
- Audicricte Ama. Silver wired. Casts new £594.00
- Rotel RCD-970BX CD Ex condition. Remote
- Sony CDP-S9000ES SACD/DVD player. Awesome
- Nad 412 tuner. Mint/boxed/boxed original receipt.
- Pioneer TX-(08L tuner. FM, LW, MW. Mint & boxed.
- Quad 44 pre amplifier. Excellent condition.
- Leak Stereo 20 rebuilt. £799
- Geir Aasen	10. Phase belt drive. £599
- Sumiko BPS EVO III speaker. £195
- Yamaha SP20 speaker. £239
- George stands for £1S63 speakers
- Meridian 200 CD Transport. Excellent condition.
- Arcane Alpha 7SE CD player. Award winner.
- Goldring 1022GX cartridge. MM. Little use. Boxed
- Audicricte Ama. Silver wired. Casts new £594.00
- Rotel RCD-970BX CD Ex condition. Remote
- Sony CDP-S9000ES SACD/DVD player. Awesome
- Nad 412 tuner. Mint/boxed/boxed original receipt.
New Speaker MFV 3  
"Made For Valves"  
Release the full quality of your valve amplifier!

Virtually all modern speakers are designed for transistor amplifiers. This means that they often don’t “hit the mark” when using valves. Our MFV 3 was designed and tested exclusively using valves, using our experience of making a wide range of Push-Pull and Single Ended valve amplifiers. An ideal partner to tubes, you will hear rich deep bass, wonderful lucid mid-range and smooth transparent treble. We use custom designed doped woven fibre bass/midrange cones with long life neoprene roll surrounds, superb silk dome tweeter, and simple high quality crossover, and long fibre MDF cabinets. Matched withers, with a choice of dark walnut or light cherry finishes. Fully Bi-wireable, complete with plinth, spikes (and cover) we are confident that the MFV 3 will delight your ears on a wide range of music. Full leaflet on iconaudio.com or ask for a leaflet by post. Only £999.00 per pair

100w Mono-Blocks

"A FINE INTRODUCTION TO THE WORLD OF SERIOUS TUBE POWER"
Hi Fi World
April 2008

Powerful, Beautiful, and Versatile!  KT88/6550 or KT90

Smooth, precise and powerful. Without any harshness. Massive 100w headroom means you can comfortably drive speakers normally out of reach of most valve amps. Hand wired “Point to Point”. Hand wound transformers. Will exceed the performance of many other brands Check our specification: Incredible 100 watts (28.3v @ 80). New all valve design by David Shaw. Low & high sensitivity means you can comfortably drive speakers normally out of reach of most valve amplifiers. An ideal partner to tubes, you will hear rich deep bass, wonderful lucid mid-range and smooth transparent treble. We use custom designed doped woven fibre bass/midrange cones with long life neoprene roll surrounds, superb silk dome tweeter, and simple high quality crossover, and long fibre MDF cabinets. Matched withers, with a choice of dark walnut or light cherry finishes. Fully Bi-wireable, complete with plinth, spikes (and cover) we are confident that the MFV 3 will delight your ears on a wide range of music. Full leaflet on iconaudio.com or ask for a leaflet by post. Only £999.00 per pair

MB 90

From £1,799 pair complete (Various upgrades available)

Kingsound®

Full range of these amazing electrostatic speakers
Now in stock! Full info on: www.kingsaudio.com.hk

You are welcome to visit our new listening room in Leicester to audition, examine and discuss our complete range of 2 Phono amps, 4 Pre-amps, 3 Power-amps 8 integrated amps, Icon and Kingsound speakers. Plus any customs mods you may require. Please ring for an appointment.


LA4 Line pre-amp

...Big beautifully controlled sound...Imagery very detailed...Distortion an all time low of 0.0009%...excellent reliability Hi Fi News July 2006

Valve rectification 2x EZ81
Twin choke smoothing.
All triode design 3x 6SN7
Remote control included
Four inputs plus tape loop
High & low level outputs
Will match any power amp
From only £699.00 complete

We Only Make 100% Pure Valve Amplification

LA4 Line pre-amp...Big beautifully controlled sound...Imagery very detailed...Distortion an all time low of 0.0009%...excellent reliability Hi Fi News July 2006

Valve rectification 2x EZ81
Twin choke smoothing.
All triode design 3x 6SN7
Remote control included
Four inputs plus tape loop
High & low level outputs
Will match any power amp
From only £699.00 complete

We Only Make 100% Pure Valve Amplification

LA4 Line pre-amp...Big beautifully controlled sound...Imagery very detailed...Distortion an all time low of 0.0009%...excellent reliability Hi Fi News July 2006

Valve rectification 2x EZ81
Twin choke smoothing.
All triode design 3x 6SN7
Remote control included
Four inputs plus tape loop
High & low level outputs
Will match any power amp
From only £699.00 complete

We Only Make 100% Pure Valve Amplification
MELODY
IYRA
KUDOS AUDIO
KOETSU
ISOTEK
G F HADCOCK
GOLDRING
DYNAVECTOR
CHORD ELECTRONICS
CHORD COMPANY
ATACAMA
ANATEK RESEARCH

Quad FM3, FM4, 66FM
Pure 702ES, excellent multiband and DAB tuner
Nakamichi CD2 recent importer service
Linn Pekin, excellent boxed
Cr. 1M7, excellent
Corn Evans Microgroove plus (upgraded ISO), as new
Systemdek II (biscuit tin), c/w Linn DIX arm, vgc
Roksan Xerxes 20/XPS7 as new, used
Regn RB300 Upgraded wiring etc
Origin Live Silver, mint boxed new version,
NAIM Stageline, excellent
Michell Orbe, excellent order, boxed
Michell Tecnoarm, nr mint
Linn Ekos, excellent
Linn 1112 early with Mission 774 tonearm
Linn LP12, Cirkus, Lingo, reasonable
Linn Ittok LV11, excellent with LP12 ormbaord
Linn LP12, valhallo/nirvano
Linn Lingo, excellent boxed
Kuzma Stogi Imam excellent
Graham Phantom, ex demo, excellent boxed
Reek OBH15, excellent boxed
Conrad Johnson EF1, excellent boxed
Relant Japanese tonearm

WELCOME TO THE NORTH EAST

1299
1249
2999
2399
1749
1199
299
299
249
449
649
549
899
349
399
399
999
799
999

Call 01642 267012 for assistance

PS Audio Quintessence ex demo
Unison Research UP.
Tog Caren CD20T end DAM excellent
Stella DP200 DA( Preamp, superb build and value
Sugden (D2ISE, nr mint boxed
Shanling CDT200, excellent boxed newer model
Pathos Digit,
NAIM CD5i2, nr mint boxed
Musical Fidelity A3.2(0, excellent, remote, box
Monarchy DAC, nr mint boxed
Krell KPS,'event losermech
Esoteric DV60 nr mint boxed
Esoteric P-05/D-05, ex demo nr mint boxed, stunning
Esoteric UR m r.
Esoteric 5A10, ex demo nr mint
Creek Evo CD, ct
Arnim Alpha 6, excellent remote
Arcam (073 black, nr mint with remote
Audio Analogue CP8571
SPECArliffirM DEALS
All new in boxes including the expensive items!!

199
249
599
399
199
999
199
199
199
199
199
199
199
299
299
299
299
299
299
299
299
299
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
499
The Piggery, Mile End Farm, Wantage Road, Oxford, Oxon. Our shop site can take direct orders for our turntables and accessories! Loricraft Audio, 17 Poole Road, Bracknell, Berkshire. Our Internet website can buy all our products directly from us but please call to arrange for a visit. You can buy all our products directly from us or through your local dealer. Our Internet shop site can take direct orders for our turntables and accessories! Loricraft Audio, The Piggery, Mile End Farm, Wantage Road, Lambourn, Berkshire, RG17 8UE Office Phone/Fax: +44(0) 1488-72267 EMAIL: terry@garrard501.com website:http://garrard501.com

The Right Note
Tel: 01225 874728. Happy with your Linn HI-FI, Multi-room AV and Home Cinema systems. PiEX, ex-demo and used Linn available. Demos by appointment.
House Demos welcome. Authorised dealers for Arcam, AMX, Artcoustic, Chord, InFocus Linn, Loewe, Lutron, Kaielodescape, Marantz, Nevo, Opus, Philips Pronto, Runko, Systemline, Speakercraft Sonos Sim2

Ceritech Audio
Ceritech Audio, Coleford, Gloucestershire. Tel: 0844 736 5719. Email: info@ceritech.co.uk. www.ceritech-audio.com. We provide bespoke Hi-Fi and AV services to customers throughout Gloucestershire, Monmouthshire, Herefordshire and surrounding areas. We offer honest and expert advice, and professional demonstrations of an envious range of top brand products. Authorised Agents for Abbey Road, DALI, Leema Acoustics, Moon, Naim Audio, Neat Acoustics, ProAc, Roksan and others.

Doug Brady Hi-Fi Kingsway
Kingsway North, Warrington, WA3 3NU Tel 01925828009 Fax 01925 825773. Visa Mastercard, 2 dem rooms, home trial, no problem. Agencies include: Arcam, AV1, Chord, Copland, Exposure, Krell, Lyra, Michell, Meridian, Musical Fidelity, Monitor Audio, Naim, ProAc, Roksan, SME, Slax, Isotek, Kudos, Sonus Faber, Spendor, Ortofon, Prima Luna, Q Acoustics, Audio Analogue, Avid, Minimalist, and many more.

Cornwall
Bigears Audio
To find a system that will allow you to hear the music instead of the equipment phone Bigears Audio, here you will find an interesting array of new and good quality products. Authorised Agents for Arcam, Chord, Copland, Exposure, Krell, Lyra, Michell, Meridian, Musical Fidelity, Monitor Audio, Naim, ProAc, Roksan, SME, Slax, Isotek, Kudos, Sonus Faber, Spendor, Ortofon, Prima Luna, Q Acoustics, Audio Analogue, Avid, Minimalist, and many more.

Essex
Rococo Systems & Design
Essex/London Linn Specialist Tel:01371856407 – 02074541234 www.rococosystems.com
We have over 30 years in entertainment solutions, We can give you expert advice on your Linn Hi-Fi, Multi-room AV and Home Cinema systems. PiEX, ex-demo and used Linn available. Demos by appointment.
Home Demos welcome. Authorised dealers for Arcam, AMX, Artcoustic, Chord, InFocus Linn, Loewe, Lutron, Kaielodescape, Marantz, Nevo, Opus, Philips Pronto, Runko, Systemline, Speakercraft Sonos Sim2

Gloucestershire
Ceritech Audio
Ceritech Audio, Coleford, Gloucestershire. Tel: 0844 736 5719. Email: info@ceritech.co.uk. www.ceritech-audio.com. We provide bespoke Hi-Fi and AV services to customers throughout Gloucestershire, Monmouthshire, Herefordshire and surrounding areas. We offer honest and expert advice, and professional demonstrations of an envious range of top brand products. Authorised Agents for Abbey Road, DALI, Leema Acoustics, Moon, Naim Audio, Neat Acoustics, ProAc, Roksan and others.
LONDON
THE CARTRIDGE MAN LTD
88 Southbridge road, Croydon
CR0 1AF Telephone: 020 6888 6565
Website: www.thecartridgeman@talktalk.net
email address: thecartridgeman@talktalk.net
UK Distributor: Hiaudio Distribution
Makers of the prize-winning range of MusicMaker cartridges and other desirable audio accessories. We also have a cartridge refurbishing service and rebuild classic valve equipment to the highest standards. "It doesn't have to cost an arm and a leg - but there is no such thing a free lunch, either."

MY AUDIO DESIGN
35 Whitehall, London, SW1A 2BX
Tel: 020 7839 8880 / 07782 137 868 E-mail: sales@madengland.com
Website: www.madengland.com E-Shop: www.shop.madengland.com

MANCHESTER
AUDIO COUNSEL
26 High St Chaddesley SK8 1AL
www.audio-counsel.co.uk
TEI 0161-491-6090
e-mail dav@davemolnar@gmail.com
Hi Fi and Home Cinema from , BW, Densen, Dynavector Cartridges Emm Labs, Hutter, Isoblu, In Focus, Naim, Neat Acoustics Pioneer, Piega, Quadraspire, Rega, Revolver, Vet, Shainman, Totem, Well Tempered Turntables, Zu Loudspeakers. Quality Hi Fi is not plug and play. We deliver and install all systems. 0% Finance available. Tuesday to Saturday 10.00am to 5.30pm Thursday till 8pm

NORFOLK
BASICALLY SOUND & VISION
Calveley Court, Southburgh Road, Heymerston, Norfolk NR9 4DD
Tel: 01362 820800
Email: enquiries@basicallysound.co.uk
Web: www.basicallysound.co.uk
We offer Naim, Rega, PMC, Blyston, PS Audio, Arcam, Wilson Benesch, Isoblu, Dynavector and others. Turntable Workshop & Multi-Room Solutions Relaxing out of town location, 2 demonstration rooms & free parking. Home demos welcome. Opening Hours Mon - Sat 9:30 – 7:30 but please call in advance on Mon, Tues & Weds.

SOMERSET
ALTERNATIVE AUDIO,
Alternative Audio,
Taunton, Somerset, Tel: 01984 624242
Email: peter@alternativeaudio.co.uk
www.alternativeaudio.co.uk
We specialise in valve amplification and vinyl replay with the accent on high quality musical enjoyment, demonstration by appointment Ex-Dem and used equipment for sale. Almarro, Art Audio, Border Patrol, EAR/Yoshino, Graham Engineering, Experience Filtration, Lector, LFD Audio, Lyra, Music First Audio, Nottingham Analogue Studio, Quadraspire, Shun Mook, SME, Vandersteen Audio, Wave Mechanic.

THE YORKSHIRE ROOM
2 George Street, Hedon, Hull, HU12 8JH.
Tel: 01482 891375. www.thearouroom.co.uk
Authorised agents for Ayre, Arcam, Bowers and Wilkins inc BD100ear, Classe, Cyrus, Densen, Dynaudio, Dynavector, Grado, Hutter, Isoblu, beyotek, Linn, Lyra, Mark Levinson, Meridian, Naim, Nordost, Proac, Quadraspire, Rega, Rotel, Stax, Stereovox and others. 0% Finance available, free parking, 3 demonstration suites, friendly and quality staff and advice, mail order service.

AUDIOPRINTIC
78 Otley Reed, Leeds 01132177294
www.audiorepublic.co.uk
For the best in quality hifi in West Yorkshire, representing Naim Audio, Rega, Sugden, Audio Research,VPI, Kreid, Copland, Sonus Faber, Arcam, Nottingham Analogue, Roksan, Hutter, Martin Logan, Proac, PMC, M&K, Finite Elements, SME, Cardas, Kudios Loudspeakers and others. Open Tuesday-Saturday 9.30am to 5.30pm

FANTHORPES HI-FI, TV & CUSTOM INSTALLATION SPECIALISTS
HEPWORTH ARCADE, SILVER STREET, HULL, HU1 1JU
Established over 60 years
Tel: 01482 223096
Web: www.fanthorpes.co.uk
Email: shop@fanthorpes.co.uk

IRELAND
TONE-PEARLS RECORDS
"REVOLUTIONARY OLD"
Tel: 353-87-942-7618
Email: info@tonepearls.com
www.tonepearls.com
New audiophile LP/vinyl records using the revolutionary new Tone-Pearls and pure analogue techniques. Live recording, unedited, unprocessed, pure analogue recording and cutting, 180g virgin vinyl pressing. New LP released: Piano Music in a Church of West Ireland, Classicals of Chopin and Debussy and more...

NORTHERN IRELAND
KRONOS AUDIO VISUAL
Dungannon. N.Ireland. Tel 02887753606
E-mail david@kronosav.co.uk
Web www.kronosav.co.uk
Ex - demo and second hand items

**Digital**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Was</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 labs Dumpy S/H</td>
<td>1425</td>
<td>799</td>
</tr>
<tr>
<td>47 labs Gemini Progression dual mono DAC x-demo</td>
<td>3884</td>
<td>2499</td>
</tr>
<tr>
<td>47 Labs PiTracer Transport x-demo</td>
<td>18000</td>
<td>9999</td>
</tr>
<tr>
<td>Arcam CD73 CD Player S/H</td>
<td>380</td>
<td>199</td>
</tr>
<tr>
<td>Copland CDAB23 X-demo</td>
<td>2300</td>
<td>1750</td>
</tr>
<tr>
<td>Electrocompaniet EMC1 UP S/H</td>
<td>3690</td>
<td>1795</td>
</tr>
<tr>
<td>Krell Evolution 505 cd/sacd xdemon</td>
<td>8598</td>
<td>6875</td>
</tr>
<tr>
<td>Krell Showcase DVD x-demo</td>
<td>3698</td>
<td>1999</td>
</tr>
<tr>
<td>Orpheus Zero CD Player S/H</td>
<td>4800</td>
<td>1599</td>
</tr>
<tr>
<td>Orell CD100EVO S/H</td>
<td>1500</td>
<td>699</td>
</tr>
<tr>
<td>Roksan Kandy CD MK1 S/H</td>
<td>N/A</td>
<td>199</td>
</tr>
<tr>
<td>Theta Pro Basic II DAC with Oscom/Balanced S/H</td>
<td>2990</td>
<td>499</td>
</tr>
</tbody>
</table>

**Analogue**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Was</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 labs MCbee xdemon</td>
<td>1000</td>
<td>650</td>
</tr>
<tr>
<td>Anatek Research MC1 Phono stage BNIB</td>
<td>850</td>
<td>599</td>
</tr>
<tr>
<td>Benz Micro ACE High BNIB</td>
<td>435</td>
<td>299</td>
</tr>
<tr>
<td>Clearaudio Smart Phono mm/MC S/H</td>
<td>265</td>
<td>195</td>
</tr>
<tr>
<td>Koetsu MCR-1 Transformer S/H</td>
<td>3333</td>
<td>1399</td>
</tr>
<tr>
<td>Kuzma Stabi XL4/313 x-demo</td>
<td>17945</td>
<td>12999</td>
</tr>
<tr>
<td>Kuzma Stabi S/Stogi S double arm version Xdemo</td>
<td>2795</td>
<td>1950</td>
</tr>
<tr>
<td>Mark Levinson No320s Phono Module x-demo</td>
<td>995</td>
<td>649</td>
</tr>
<tr>
<td>Lehmann Black Cube Twin BNIB</td>
<td>900</td>
<td>599</td>
</tr>
<tr>
<td>Lehmann Black Cube Linear BNIB</td>
<td>1300</td>
<td>950</td>
</tr>
<tr>
<td>Roksan Xerxes DX2/XPS/DSU Standard Power Supply</td>
<td>800</td>
<td>640</td>
</tr>
<tr>
<td>Sumiko Blue point Special EVO III x-demo</td>
<td>249</td>
<td>175</td>
</tr>
</tbody>
</table>

**Preamplifiers**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Was</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Research SP17 stereo preamplifier x-demo</td>
<td>2749</td>
<td>2199</td>
</tr>
<tr>
<td>Karan Acoustics Kal preamplifier S/H</td>
<td>3720</td>
<td>2250</td>
</tr>
<tr>
<td>Quad Q24 Preamplifier S/H</td>
<td>770</td>
<td>399</td>
</tr>
<tr>
<td>Roksan L1 Preamp (wall wart included) S/H</td>
<td>2299</td>
<td>695</td>
</tr>
</tbody>
</table>

**Amplifiers**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Was</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 Laboratory Power Humpy x-demo</td>
<td>1425</td>
<td>799</td>
</tr>
<tr>
<td>Audio research VT 60 S/H</td>
<td>N/A</td>
<td>799</td>
</tr>
<tr>
<td>Anatek A5OR Remote class A integrated x-demo</td>
<td>1850</td>
<td>999</td>
</tr>
<tr>
<td>Audio Research VS115 stereo power amplifier x-demo</td>
<td>4988</td>
<td>3995</td>
</tr>
<tr>
<td>Gryphon DM100 Dual mono power amplifier S/H</td>
<td>15000</td>
<td>3999</td>
</tr>
<tr>
<td>Krell KAV400Xl Integrated Black S/H</td>
<td>2989</td>
<td>1599</td>
</tr>
<tr>
<td>Krell Evo 402 400w stereo power amplifier Black x-demo</td>
<td>12900</td>
<td>8999</td>
</tr>
<tr>
<td>Krell Evo 302 300w stereo power amplifier Black x-demo</td>
<td>8950</td>
<td>7160</td>
</tr>
<tr>
<td>Quad 909 Power amplifier S/H</td>
<td>999</td>
<td>599</td>
</tr>
</tbody>
</table>

**Loudspeakers**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Was</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avalon Opus Cherry S/H</td>
<td>16000</td>
<td>6999</td>
</tr>
<tr>
<td>Korus Essence Floor stander zebrano x-demo</td>
<td>2800</td>
<td>1350</td>
</tr>
<tr>
<td>Martin Logan Vista Dark cherry x-demo</td>
<td>'3490</td>
<td>2750</td>
</tr>
<tr>
<td>Martin Logan Fresno pair inc Stands S/H</td>
<td>1500</td>
<td>699</td>
</tr>
<tr>
<td>Martin Logan Ariel Oak S/H</td>
<td>3999</td>
<td>1099</td>
</tr>
<tr>
<td>Martin Logan Vantage dark cherry x-demo</td>
<td>5149</td>
<td>3999</td>
</tr>
</tbody>
</table>

**Cables and Accessories**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Was</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attocama Equinox3 tier stand x-demo</td>
<td>375</td>
<td>199</td>
</tr>
<tr>
<td>Attocama Europe Reference 8 3 tier S/H</td>
<td>550</td>
<td>299</td>
</tr>
<tr>
<td>Cardas Golden Cross 1m XLR-RCA S/H</td>
<td>850</td>
<td>399</td>
</tr>
<tr>
<td>Cardas Cables Golden Cross3m Bi wire speaker cables</td>
<td>1999</td>
<td>999</td>
</tr>
<tr>
<td>Cardas Cables Golden Power Cord 33inch UK-IEC mains</td>
<td>325</td>
<td>162</td>
</tr>
<tr>
<td>Cardas Cables Golden Cross 6m set of RCA interconnects</td>
<td>2830</td>
<td>1415</td>
</tr>
<tr>
<td>Densen De-magic BNIB</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Electrocompaniet ECS1 M6 feet x4 BNIB</td>
<td>189</td>
<td>49</td>
</tr>
<tr>
<td>Cogan Hall Intermezzo EMD 0.75m RCA S/H</td>
<td>N/A</td>
<td>99</td>
</tr>
<tr>
<td>Eichmann Express 4 interconnects BNIB</td>
<td>80</td>
<td>49</td>
</tr>
<tr>
<td>Finite Elemente Resonator BNIB</td>
<td>320</td>
<td>225</td>
</tr>
<tr>
<td>Mana acoustics Mini table S/H</td>
<td>240</td>
<td>75</td>
</tr>
<tr>
<td>Madrigal MDC 1.1m AES/EBU 110 ohm Digital Cable S/H</td>
<td>420</td>
<td>199</td>
</tr>
<tr>
<td>Siltech HF9 AES/EBU 1m Digital S/H</td>
<td>420</td>
<td>199</td>
</tr>
<tr>
<td>Spectral M-350 20ft interconnect S/H</td>
<td>2100</td>
<td>899</td>
</tr>
<tr>
<td>Transparent Reference SC 2x10ft x-demo</td>
<td>6192</td>
<td>3399</td>
</tr>
<tr>
<td>Transparent Balanced Reference 2x30ft x-demo</td>
<td>6345</td>
<td>3499</td>
</tr>
</tbody>
</table>

**Tuners & Tape decks, power supplies**

- Magnum Dynalab FTR remote/Tuner for Elude S/H 395 199
- Living Control

We have a large record collection mainly Jazz and Classical from £3.00 up to £20 for some boxed sets. Please call for more details.

Midland Audio X-change are looking for All high end audio separates best to £20 for some boxed sets. Please call for more details.

Midland Audio X-change are looking for High Quality Audio Systems, Krell, Mark Levinson, Naim Audio, SME, Wadia.

Midland Audio X-change are looking for Audio Research, Krell, Mark Levinson, Naim Audio, SME, Wadia.
FREE READER CLASSIFIEDS

TERMS AND CONDITIONS: Only one advert per reader. No Trade adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Maximum length per advert is 30 words. Adverts over 30 words will not be accepted. Telephone numbers and e-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Email your advert to: classifieds@hi-fiworld.co.uk or fill in the form on page 129 and post it to Hi-Fi World Free Readers Ads, Suite G4, Argo House, Kilburn Park Road, London NW6 5LF. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

OPERA SECONDA speakers. Stunning finish in cherry veneer and black leather £875. £2000 new. Unison Research FMRDS/AM valve Unico 'R' tuner £575 (£1275 new). Both mint and boxed. Superb reviews. Tel: 020 8073 8935

ABOUT 70 Vinyl albums, good condition, for £50, with free belt drive Sony turntable. Working order. Wanted: Good single ended integrated amp, KT88 or EL34 preferred. Tel: Stanley 07951 533 091 (London NW)

KORA EXPLORER 90si quality sounding 60 watt hybrid integrated amplifier. Current cost £700 boxed with manual and spare valves. Excellent condition. £225. Tel: 07729 600 847 (West Midlands)

REGA PLANAR Two RB250 £50. Denon DRH500 cassette deck £20. Tel: Martyn 01278 459 405 power amp £160. Both in mint condition. für sale mint condition, can trtridge, excellent £45. Tel: 01243 405 power amp £160. Both in (West Sussex)

TECHNICS DIRECT drive turntable with Ortofon VMB-30, good condition, plinth cover, £100, no offers. Mains isolating transformer, seven amperes, many taps, £50. (ex Atomic Energy Research Establishment) Tel: Stanley 07951 533 091 (London NW)

DYNAUDIO CRAFT cherry finish plus Something Solid stands, boxed, very good condition, £890 ono. Musical Fidelity 270 Il, unboxed, lamp, not operational but amp works ok, £250 ono. Tel: Rob 01384 396 657 (West Midlands)

LOWTHER LOWTHER Acousita Twin cabinets wanted. Made late 1960's. Also PM7A drive units. Any condition. Working drawings. Twin feet. Drive unit mounting screws. Tel: Jeff 020 8220 0380

WANTED: REGA P2. Can pay up to £100. Can collect in Chesterfield area, Otherwise must post. Tel: 07983 913 214

QED TS20 2 way tape switch-box interconnects: 2x Kimber Tonik, 3x Cambridge Arctic One Cambridge Pacific, offers? Tel: 021 476 8507 after 6pm (Birmingham)

LINN INDEX speaker stands, black, £25. Rega Planar 3 with RB300 arm, £150. Cyrus DAD 1.5 CD player with remote £125. Goldring 1012GX cartridge, needs stylus, £40. Tel: 01275 470 619

QUAD FM3 tuner £70. Quad 405 power amp £160. Both in good condition. Tel: 01278 459 556

SNELL TYPE E with Pirates stands £450. Quad ESL 57 One Thing rebuild £600. Audio Innovation First Audio monoblocks £450. No offers. Tel: 01986 872 933 (Suffolk)

MUSICAL FIDELITY A1001 Class 'A' integrated amplifier, 200wpc. Excellent sound and condition. Manual and remote. Must be collected (30kgs) £860 ono. Tel: 01905 772 175 (near Worcester)

MONITOR AUDIO Bronze BR2 speakers £95 and Denon RCD M37 DAB CD receiver £120. All mint, boxed. Tel: David 020 8656

MICHIEL ARGO pre-amp £200 (boxed) &K V125 12” Sub £200. Pro-ject Debut III black £85. Cambridge Audio 460p MC-MM phono-amp £65. Mordaunt Short Pageant Series II (boxed), teak, £60, NAD 3020 pre-amp £20. Tel: 01722 334 694 (Salisbury)

TANNONY DUAL Concentric 3LZ 10” Monitor Golds, mint condition. Offers over £600. Sansui 1001 SP 3 way speakers £150. Optimum speaker stands glass wood, £50. Tel: Derreck 01455 220 214 (Coventry)

CROFT MICRO 25 New Line pre-amp with MM phono stage. Brand new with box and lead, £450. Tel: 01562 887 358 (West Midlands)

AKAI REEL to Reel GX221D 3 head, 3 motor, auto reverse. Free to good home. Tel: 01422 373 812 or Email: lindawooh@benten.com (Halifax)

NAIM AUDIO CDS2 CD Player and power supply. Brand new Laser mech fitted in June. Naim 102 pre amplifier. Naim CD1 CD player. Croft Epoch (special) valve preamplifier. Lector Zoe valve pre booster. Two (Russ Andrews) Kimber signature Power cords 1 mtr Cardass interconnect, 1 mtr Length (Quality Cable) 2 Kimber Power Cords, 0.5 mtr length Din to Din attenuated interconnect for Naim pre to CD. Cables £100 wph mono power amps (transistor). Please telephone for sensible prices. Tel: 020 8534 2181

AUDIO ALCHEMY DDE3 and dedicated Power Station 3 digital to analogue converter. Fully HDCD compatible coaxial optical inputs. Audiophile sound. Rare opportunity, £350. Tel: Robert 07968 597 935

DECCA FFSS Head Mk3, recent overhaul! £130. Systm 935 speakers £150. Quad 33 disc and tape adaptor cards £10 each disc amplifier modified £15. Tel: 01344 776 445

WANTED: DAMAGED early Di/E type Hadcock arm. Please text: 7958 023 685

PAIR DECCA KELLY Mkll horns and Kelly 12” bass units in Mordaunt design infinite baffle cabinets. Bass units now need foam surrounds replacing. What offers? Tel: 01524 791 555

REGA P5 turntable with RB700 tonearm and new Ellys 2 cartridge. Unmarked mint condition with original packaging. £395. Tel: 01639 641 043

www.hi-fiworld.co.uk  SEPTEMBER 2009 HI-FI WORLD 123
its what you don’t see that creates the music

“UKD Studio is a place where you can experience the ultimate in European listening pleasure, from our unique selection of hand crafted pieces of hifi architecture to our unparalleled service...”

Dana Berkmen : UKD Studio

We cater for all tastes and pockets and deliver a product and sonic experience that’s second to none.

Our facilities are there for your exclusive use to enjoy and select the best listening experience to suit your taste, budget and at your convenience.

We can supply and install complete systems with stands, cables and mains filtration, or alternatively help you upgrade and build your system piece by piece... and we carry the largest range of these brands in the country, so that you are able to experience and decide efficiently and in comfort.

Our ultimate goal is your complete satisfaction, through the best quality products, service and attention to detail.

ukd studio

Abbey Business Centre
18-24 Stoke Road, Slough
Berkshire, SL2 5AG, England
(Near to M25/M4/M40)

t: 01753 722 050

e-mail: studio@ukd.co.uk

web: www.ukd.co.uk

uk’s largest demonstration range of:
graaf
kemp
opera
pathos

thorens
triangle
unison research
benz micro
for my Technics SL-P1200B C.D system and individual remotes. Well reviewed. C/VVVDH leads, and excellent condition (one FM tuner. Owned from new, amplifier. £600 CD player, £500 E500 8902. £550. Tel: 0207498-quick sale as a WHOLE SYSTEM based entry level system For cable 2x2m. Great little vinyl - qed silver anniversary speaker (maple), Rega Turntable wall Amplifier, Rega RI Speakers but no cartridge), Rega Brio FOR SALE: Rega system Rega thank you. laurence@waitrose.com please email DESPERATELY SEEKING a lent condition 450 pounds. Tel Kenwood KT-917 Tuner ex-amp 1600 pounds excellent. £950. Qeddor 33 panels.Also required Quad 405-2 amplifier boards, £275. Contact Robin on 020 8670 2109 NEW/UNPLAYED /sealed vinyl LPs at 50% of new cost. 60 second-hand albums from £3 each.1 will separate if necessary. Tel: 01453 544354 for list. PRIMARE V20 Disc Player. £450. B & W 685 (black) Stand mount speakers - £220. PRO-JECT Phono Box SE MC/MM - £60. Bill - 0208 464 9055 (Bromley - SE London)
A new lease of life for your Musical Fidelity amp, CD or DAC.

To upgrade your hi-fi without losing a penny in part exchanges, book in for a factory tune up from Musical Fidelity. We carry out an exhaustive list of upgrades that gives well-used gear a new lease of life and means your favourite gear can perform as never before.

We can tune up everything we have made since 1985, except the SACD player, and our upgrades come with a one-year Musical Fidelity warranty. Please note: nobody else is authorised to tweak our amps.

With a tune up, you pay only for the upgrade in performance, instead of losing on a part exchange.

To find out more, phone us on 020 8900 2866 or visit musicalfidelity.com, where you can download a Booking Form today.

Lyngdorf RoomPerfect – “just another gimmick”

And that self-appointed expert went on to say that “all class D digital amplifiers are s..t too!” Hmm. No preudice there then.

I'm Howard Popeck – the owner & sole employee here. I've been in this business, on & off, since 1976. Lyngdorf are really onto something. They've gone further towards achieving a practical & credible real-world approach to removing the room from the “good sound” equation than anyone else. Yes, anyone.

Over half of what you hear on your hi-fi is created by the acoustics of your listening room. This fundamental problem affects any system & is the primary reason why good components simply don't give good sound in most rooms. Lyngdorf reduces the distortion that rooms create from a typical 20db to less than 2db.

Do you want proof? Good. So, when can I visit?

I offer RoomPerfect In three options; the DPA-1 digital preamp, the RP-1 standalone room correction processor & as part of the extraordinary TDAi 2200 full digital integrated amplifier. You'll be amazed. You might not buy it. You might not be able to afford it. But you'll be taken aback. I guarantee it. Naturally, I have the CD-1 CD player & the mighty Millennium IV on demo too...

In a nutshell: It's Lyngdorf – & done right because I come to you.

To experience the extraordinary, contact Stereonow on:
020 8447 8485 • www.stereonow.co.uk
CLASSIC CONTACTS

When a classic goes 'poof' your troubles have just started, but there may be a good ending. Replacing failing parts can improve the sound, so here is a short listing of all those companies who specialise in getting a classic up and running again after its deposited a small ring of soot on your ceiling!

GT AUDIO
(Graham Tricker, Bucks)
Leak Troubleshooter specialists. Also Quad and most classic tuners, tuners, racks and amplifiers restored, repaired.
Tel 01892 636842 or email fotherw@tiscali.co.uk

LEAK
Tel Sweden: +46 477 10734

NAKAMICHI 400Z Needs minor mechanical repair and a service. Free to anybody who will collect it from St.Albans.
mgoodman@iie.org 01727 837044

SOUND ORGANISATION
ZS60 Hi-Fi Stand. Former
What Hi Fi * equipment support. Silver metal frames with 5 adjustable Silver coloured glass shelves in "as new" condition. Collection only. £50.00 for a quick sale Contact. Tel 01324 636842 or fotherw@tiscali.co.uk

ATC-SCM 10 passive monitors in rosewood + stands, boxes. VGC £280 ono. 01372 729569 (Surrey).

AUDIO ANALOGUE
Bellini preamplifier and 2 x Donizetti power amps in excellent working order. Italian handcrafted amplifiers. £580.00 (may consider splitting) For further info Tel 01324 636842 or email fotherw@tiscali.co.uk

LEAK 2075 speakers immaculate: £595. JBL 4601 directdrive turntable £495. EAR directdrive turntable £495. EAR 8073 8935.
Tel: 023 8072 4434

REVOLVE CYGNIS
Loudspeakers, as new 14 months old, superb reviews, £4250 (£6000) ONO, buyer must collect. Tel 01843 600722 evenings. (Southeast Kent)

NAIM NAC A4 white speaker cable 10 mtr pair £40.00. QED phonophone interconnect lead £5.00, A&R Cambridge T21 FP1 tuner teak finish immaculate condition £60.00. Pioneer PD 6700 compact disc player black £50.00. Nakamichi 680 Z3 3 head twin speed cassette deck £150.00. SME 3009 Mk2 10" detachable headshell tone arm £20.00. SME armboard for Linn Sondek LP 12 turntable £5.00 Telephone 01228 544736.

ARCAM CD28T as new £60. Suddin A21 Boxed as new £90. Wharfedale Pacific Evo 30 floorstanders maple boxed £399. Tel 01493 665761

QUAD 2 valve amps plus pre amp, working order, great sound, made in 1959, with manual. £6 895 Contact 01773 520671 Derbyshire

15" SILVER TANNOY Dual-concentric Horn with crossover. All original unmolested. Best offer over 3500 US dollars. Pictures on request. Serious inquiries only please. Shipping from U.S. actual cost.
joensab@hotmail.com

FOR SALE.Tri Vista 21 DAC box from U.S. actual cost. £500 Contact 01773 520671

I HAVE a Bill Beard BB-100 amp for sale. It needs checking on the power supply side and new valves. It has the cover as well but it needs a puncture weld and repainting! I guess. I will accept offers around 480£. I also have a 500W sub amp and a Shiva 12" Woofer (2 x 600W RMS) made by Adire. Price 500£. Dan 07872 148082

ARCAM CD23T cd player. Silver, original box, remote, immaculate. £150 posted (£450). Lee West Midlands 01384 412234

LEEK2009@hotmail.co.uk

NAIM CD555 £7500 no. 24****
5555S £3000 no. 23****
NAC552/PS £9000 no. 25****
All bought new, mint condition, boxed with all accessories. Contact sawheal@aol.com

FOR SALE. Quantity of 10.5 inch open reel tapes, some unused! TDK, Maxell, Zonal, Scotch, Basf, etc. all boxed. Also 7 inch available. Wanted. Audiolab 8000A Amp. Phone Ray 01733 347308

REGA F3 (no cartridge), Rega Bono, Rega R1 Spsks., Partington Spsks. Quid Spkr. Cables & Wall-shelf. For Quick Sale As Whole System: £550.00. Tel: Des 0207498-8902

NAIM NAIT Si Amplifier
Naim Nait Si CD Player
Mint condition as new £650
Tel 02380 224003

REVOX CYGNIS
Loudspeakers, as new 14 months old, superb reviews, £4250 (£6000) ONO, buyer must collect. Tel 01843 600722 evenings. (Southeast Kent)

SOTWER TRANSFORMERS
(Brian Sower, Lewisham) Large range of audio transformers for valve amps, car-fiddles, line drive, interstage plus all associated services. Tel 01473 252794 www.sotwer.co.uk

WEMBLEY LOUDSPEAKER
(Des 0207498-8902)

CLASSIC NAORMICHI
(Stuart, Bucks)
Re-conning of hi-fi loudspeakers, high quality loudspeaker systems, PA., power loudspeakers. Tel 01903 693695

NAIK NAIT Si Amplifier
Naim Nait Si CD Player
Mint condition as new £650
Tel 02380 224003

REVOX CYGNIS
Loudspeakers, as new 14 months old, superb reviews, £4250 (£6000) ONO, buyer must collect. Tel 01843 600722 evenings. (Southeast Kent)

WEMBLEY LOUDSPEAKER
(Des 0207498-8902)

CLASSIC NAORMICHI
(Stuart, Bucks)
Re-conning of hi-fi loudspeakers, high quality loudspeaker systems, PA., power loudspeakers. Tel 01903 693695

LOCKWOOD AUDIO
(London)

ATTWOOD CONCERT Stage moving coil phono amp, the most sublime and lyrical phono stage under £1,000 (see last month's review in this magazine). Mint condition. Cost £465, sell £480. 020-8366-2647.

YAMAHA NS-1000PM speakers excellent condition £750 pounds. Target stands 150 pounds pair. Tel Sweden: +46 477 10734 Kent

LINN KOMPONENT 110 floorstanders in silver, also component 120 subwoofer all 2yro old. orig.cost £1600 yours for £400.tel 01777 711 386 (noto)


ABOUT 70 Vinyl albums, good condition, for £50, with free belt drive Sony turntable. Working order. Wanted: Good single ended integrated amp, KT88 or EL34 preferred. Tel: Stanley 07951 533 091 (London NW)

NAIR JCD55S £7500 no. 24****
5555S £3000 no. 23****
NAC552/PS £9000 no. 25****
All bought new, mint condition, boxed with all accessories. Contact sawheal@aol.com

FOR SALE. Quantity of 10.5 inch open reel tapes, some unused! TDK, Maxell, Zonal, Scotch, Basf, etc. all boxed. Also 7 inch available. Wanted. Audiolab 8000A Amp. Phone Ray 01733 347308

REVOX CYGNIS
Loudspeakers, as new 14 months old, superb reviews, £4250 (£6000) ONO, buyer must collect. Tel 01843 600722 evenings. (Southeast Kent)

SOTWER TRANSFORMERS
(Brian Sower, Lewisham) Large range of audio transformers for valve amps, car-fiddles, line drive, interstage plus all associated services. Tel 01473 252794 www.sotwer.co.uk

WEMBLEY LOUDSPEAKER
(Des 0207498-8902)

CLASSIC NAORMICHI
(Stuart, Bucks)
Re-conning of hi-fi loudspeakers, high quality loudspeaker systems, PA., power loudspeakers. Tel 01903 693695

LOCKWOOD AUDIO
(London)

NAIR JCD55S £7500 no. 24****
5555S £3000 no. 23****
NAC552/PS £9000 no. 25****
All bought new, mint condition, boxed with all accessories. Contact sawheal@aol.com

FREE READER CLASSIFIEDS

When a classic goes 'poof' your troubles have just started, but there may be a good ending. Replacing failing parts can improve the sound, so here is a short listing of all those companies who specialise in getting a classic up and running again after its deposited a small ring of soot on your ceiling!

GT AUDIO
(Graham Tricker, Bucks)
Leak Troubleshooter specialists. Also Quad and most classic tuners, tuners, racks and amplifiers restored, repaired.
Tel 01895 833099
Mob 07966 963579
www.guaudio.com

TECHNICAL AND GENERAL
(East Sussex)
Turntable parts - wide range of new and vintage equipment purchased, selected new equipment available. Redundant / faulty spares, service and repair. Accessories also available. Tel 01493 665761

ARLEYS ELECTRONICS
(Northumberland) Specialist in repairs, restoration and modifications to all types of cartridge. Including precise profiling for 78s. Tel 01672 827604
Email: arleystelec@btinternet.com

EXPERT STYLUS COMPANY
(Wynham Hodgson, Surrey) Stylist replacement service for all types of cartridge. Including precise profiling for 78s. Tel 01372 276604
Email: wood@expertstylus.com

NOCTIVE WORKSHOPING
(Brisith)
Unit 2, 16 Midland Street, St Phillips, Bristol.
Tel 0117 292 6015
Tel www.octave-aw.co.uk
October’s Hi-Fi World is a celebration of both analogue and digital. We have the very newest Linn Sondek LP12 with the excellent Radikal DC motor upgrade, and Avid’s brand new Super Diva turntable. Then there’s the latest dCS Paganini transport and DAC plus Naim’s new CD5xs mid-price CD player. Add in a wealth of other new products, such as the just-upgraded Yamaha Soavo 1.1 Piano loudspeaker and the Aura Note style system (pictured), Wharfedale Diamond 10.1 mini monitors and Leema Agena phono stage, and it’s another bumper issue to keep you entertained as the long nights begin slowly to draw in!

Here’s just some of what we hope to bring you:

- DCS Paganini CD/SACD Transport & DAC
- Yamaha Soavo 1.1 Piano Loudspeakers
- Electrocompaniet EC4.8 Preamplifier
- Wharfedale Diamond 10.1 Speakers
- Cambridge Audio 650C CD Player
- Triangle Quartet Loudspeakers
- Linn LP12 Radikal Turntable
- Avid Super Diva Turntable
- Aura Note Premier System
- Leema Agena Phono Stage
- Rotel RCD-1520 CD Player
- B&W CM9 Loudspeakers
- Naim CD5xs CD Player
- iPod Dock Mini Test
- SME 312S Tonearm
- Devilsound DAC

PICK UP THE OCTOBER 2009 ISSUE OF HI-FI WORLD ON SALE AUGUST 28TH, OR SUBSCRIBE AND GET IT DELIVERED TO YOUR DOOR: p82
TERMS AND CONDITIONS: Only one advert per reader. Maximum length per advert is 30 words. Adverts over 30 words will not be accepted. No Trade Adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Sorry, we cannot accept adverts over the telephone. The Publisher reserves the right to judge submissions.

You can email your advert to us at: classifieds@hi-fiworld.co.uk or write or type your advertisement copy in block capitals with one word per box and post it to us at:

Hi-Fi World Free Readers Ads,
Unit G4, Argo House, Kilburn Park Road,
London, NW6 5LF.

WE WILL ACCEPT PHOTOCOPIES OF THIS FORM

Name:
Address:
Post Code:
Daytime Tel:

FREE READER CLASSIFIED ADS ORDER FORM

ORDER/INDEX

FREE READER CLASSIFIED ADS COPY DEADLINES
OCTOBER 2009 - 5TH AUGUST
NOVEMBER 2009 - 7TH SEPTEMBER

www.hi-fiworld.co.uk  SEPTEMBER 2009 HI-FI WORLD 129
The problem with radio, TV, magazines and the newspapers is not what they say, it's what they don't say. It's not who they talk about, it's who they leave out. What we forget is that the media is run by and produced by people, just like you and I. Not supermen and women. People with their own tastes, their own bias and agendas and their own sense of justice. And so, just because they print something, it doesn't mean that it's right. Similarly, just because they don't print something, it doesn't mean that it should be ignored...

A case in point is Edward Ka-Spel, an artist that isn't written about or listened to by the so-called opinion formers. But does that make his work less worthy than The Beatles, Frank Sinatra or Mozart? Ka-Spel suffers, as do thousands of other artists, through a lack of exposure. Yet, there are people of passion and conviction out there who at least attempt to redress the balance.

Chris McBeth's Beta-lactam Ring Records (www.blrrrecords.com) is one such source of support for Ka-Spel, founder and lead singer for the cult outfit the Legendary Pink Dots, and others like him on the label such as Nurse With Wound, Volcano The Bear, Troum, Andrew Liles and more who are bringing us music which might not fit the chart mould but which certainly widens our musical appreciation.

Originally released in 2003, 'O'Er a Shalabast'r Tyde Strolt Ay' wouldn't know a three-chord pop sequence if it fell over it. This is an album of sonic washes, dark ambience and sounds from the universe. Ka-Spel himself can also be heard in both treated and untreated vocalisations lending further layers of mood that shifts like the Sahara sand, reflecting sounds that follow the same parallel pathway, then conflict, then merge as one. For the new reissue of this album, on BLRR, Randall Frazier handled the remastering. A task which he saw as a way of extracting more musical information from the performance than was present on the original release – an audiophile-friendly mission, therefore.

Frazier used a preamp clone from a late-sixties console to process the signal. "I try to avoid downsampling (that is, taking a 24bit file and reducing it to a 16bit file for CD) in the computer as much as I can. I do that through the preamp clone," he said. Is that a big deal? Well, yes it is, actually. The reason being that, "something happens when you ask a computer to do these mathematical calculations to your mixes. There's often weird little anomalies that happen. I'm not talking about glitches and pops because they are obvious errors. No, this is something else. When using the computer, the music seems to lose a dimension, a lack of depth and space. What's really happening here is that part of the data is being 'smeared' and 'blurred.' Hence, sampling down in the console does the same job as the computer but in an analogue fashion."

So, Frazier downsampled the original 24bit Ka-Spel music in the console. But that's not all. A computer would downsample and then save the code and you're done. Frazier, in this case, used the console to downsample the Ka-Spel album which then played that signal – it didn't actually save the signal. Frazier then chose the best quality piece of kit to do the saving, it's a bit like having an integrated amp on one side (the computer process) and a preamp with a couple of monoblocks on the other (the console process). Each part of the process is divided and given to the bit of the hardware especially made to do the best job.

Frazier then manipulated the Ka-Spel album via Cubase. "I prefer it to Pro-Tools," he said, "as you can get locked into the Pro-Tool 'system.' You're stuck with the hardware that they provide, Cubase allows you to assemble your own system from the ground up. It requires a bit more know-how but you're not tied down to limited choices."

Frazier mastered the album in his own specially designed room. We have heard Noel's words of wisdom on the sound of a room in past issues, and Frazier is certainly of the same mind, making sure he neutralised the room's acoustics so at no time did the sound of the surroundings influence the master in any way. The result is an exceptional reissue which does squeeze more sound out of the original, moving the final release that bit closer to Edward Ka-Spel's original vision. PR
Size really doesn't matter.

Close your eyes when listening to the Usher DANCER mini speakers, and you forget about their size immediately. The weight, energy and scale of ambience reproduced by these speakers simply defy their physical size. You'll also be pleasantly surprised that coherence and precision, often unique to small monitors, are an essential part of the Usher DANCER mini experience.

**DANCER mini one**
- 2-way system
- 1.25" dome tweeter
- 7" woofer
- Sensitivity: 87 dB @ 1 watt - 1m
- Nominal impedance: 8 ohms
- Frequency response @ -3 dB: 38 Hz - 40 kHz
- Dimensions (w x d x h): 31 cm x 36.5 cm x 105 cm

**DANCER mini two**
- 2-way system
- 1.25" dome tweeter
two 7" woofers
- Sensitivity: 90 dB @ 1 watt / ft
- Nominal impedance: 4 ohms
- Frequency response @ -3 dB: 28 Hz - 40 kHz
- Dimensions (w x d x h): 34 cm x 48 cm x 123 cm
If music really matters...

Electrocompaniet products are now available from most branches of Audio T.
For a complete list of dealers please visit our website

Made in Norway
WWW.ELECTROCOMPAHNIET.NO